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**Vol. 48**

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**No. 218**

**CATALOGUE OF THE PALEOCENE AND EOCENE  
MOLLUSCA OF THE SOUTHERN AND  
EASTERN UNITED STATES**

**PART I. PELECYPODA, AMPHINEURA, PTEROPODA,  
SCAPHOPODA, AND CEPHALOPODA**

**By**

**KATHERINE V. W. PALMER**

**AND**

**DORIS C. BRANN**

**Paleontological Research Institution**

**June 25, 1965**

**Paleontological Research Institution  
Ithaca, New York, U.S.A.**

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The authors are indebted to many persons from whom we have sought information or verifications of material submitted to them. All have given cooperatively of their time. We wish especially to thank James E. Allen of Alexandria, Louisiana, Judge Leon M. Bazile, Ashland, Virginia, M. Beauvais, Laboratoire de Géologie de la Sorbonne, Paris, France, Roger L. Batten, William K. Emerson, and Norman D. Newell, American Museum of Natural History, Edgar Bowles, Washington, D.C., Kenneth E. Caster, University of Cincinnati, Robert Chambers, Wagner Free Institute of Science, Philadelphia, Pennsylvania, André Chavan, Chantemerle, Seyssel, France, R. J. Cleevly, Deputy Librarian, British Museum (Natural History), L. R. Cox and C. P. Nuttall, Department of Paleontology, British Museum (Natural History), Fred L. Dimock, University of Michigan Library, William H. Hay, University of Illinois, W. G. Heaslip, Syracuse University, Gertrude D. Hess, American Philosophical Society, Philadelphia, Vilma Hudak and the late Mrs. Patricia O'Brien, New Jersey State Museum, Walter B. Jones, Philip E. La Moreaux, and Charles W. Copeland, Geological Survey of Alabama, F. Stearns Mac Neil and Ellen J. Moore, U.S. Geological Survey, Menlo Park, California, John Marwick, formerly New Zealand Geological Survey, Winnie McGlamery, formerly Geological Survey of Alabama, Patrick C. Mudd, clerk of Court, La Plata, Maryland, Lewis G. Nichols, Louisiana State University, David Nicol, University of Southern Illinois, Matthew H. Nitecki, Walker Museum, University of Chicago, Richard K. Olsson, Rutgers University, Edward D. Pearce, 2d, Museum of Science, Boston, Mrs. Venia Phillips and Horace G. Richards, Academy of Natural Sciences of Philadelphia, Emma

B. Richardson, Charleston Museum, South Carolina, Peter U. Rodda, Bureau of Economic Geology, University of Texas, Jean Roger, Bureau de Recherches, Géologiques et Minières, Paris, France, Henryk B. Stenzel, Shell Development Company, Houston, Texas, H. B. Whittington, Museum of Comparative Zoology, Cambridge, Massachusetts, Barbara Bedette and Druid Wilson, U.S. Geological Survey, Steve Windham, Florida Geological Survey, and J. M. Edmonds, University Museum, Oxford, England.

The libraries of the American Museum of Natural History, New York City, Cornell University, the Paleontological Research Institution, Ithaca, New York, and the United States Geological Survey in Washington, D.C., have been generous in the loan of pertinent books not available to us elsewhere. The British Museum (Natural History), London, England, has had photocopies made of pages of several books which we needed. We appreciate this help.

The late T. H. Aldrich had in the heyday of his fossil researches negotiated with Otto Meyer to draw various types of fossil mollusks in the Academy of Natural Sciences at Philadelphia. These consisted of the Eocene and Oligocene species of Conrad, Lea, Gabb, and Heilprin. Mr. Aldrich turned the book of the drawings of the gastropods over to the senior author when she was monographing the Claibornian gastropods. Plates of engravings of these drawings were included in the *Bulletin* (Palmer, 1937, plates 78-90). The Meyer drawings were realistically executed, and the publication of those drawings placed on record illustrations of types which had not been figured but later lost or had been poorly illustrated originally. At Mr. Aldrich's death the collection of the Meyer drawings of the pelecypods were deposited at the Geological Survey of Alabama. Through the courtesy of State Geologist P. E. La Moreaux and the Survey, the suite was loaned to us with permission to use those which we felt desirable. Most of the illustrations of types included are from the collection. We are indebted to the Alabama Geological Survey for this privilege.

Thanks are expressed to Mrs. Marjorie Jones for typing the manuscript and to Mrs. Fay Briggs for drafting the stratigraphic chart.



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CATALOGUE OF THE PALEOCENE AND EOCENE  
MOLLUSCA OF THE SOUTHERN AND  
EASTERN UNITED STATES  
PART I. PELECYPODA, AMPHINEURA, PTEROPODA,  
SCAPHOPODA, AND CEPHALOPODA

KATHERINE V. W. PALMER\*

AND

DORIS C. BRANN†

ABSTRACT

The area of the Paleocene and Eocene molluscan species enumerated is that from Texas through the Mississippi embayment, Florida, to New Jersey. Part I includes the described species of pelecypods, chitons, pteropods, scaphopods, and cephalopods. Part II will contain those of the gastropods. The compilation regarding each species contains the present specific combination with the family, complete synonymy, type stratigraphic range, type locality with additional occurrences, kind of type specimen with the depository of the type if known. Specific names other than that of the heading are cross-referenced. Species which have been listed by authors under the typical name of which there is doubt as to their identification are segregated under the generic name with "sp." Effort has been made to include all pertinent corrections and stratigraphic information from published and available unpublished papers. About 1177 specific headings are presented in Part I. A table is compiled which contains all of the species listed in Pt. I with units: Paleocene, lower, middle (lower, middle, upper Claiborne combined and Gosport sand), and upper Eocene. A stratigraphic column for Paleocene and Eocene members, formations, and groups as used in the text is included. Cf. *Miodontiscus timothii* is a new name proposed for *Crassatellites clarkensis* Aldrich, 1911 not Dall, 1903a. *Nuculana hannahae* is a new name for *Leda milamensis* Harris, 1896 not *L. milamensis* Harris, 1895a.

INTRODUCTION

One hundred forty years ago John Finch (1824) described the first Eocene mollusk from the Atlantic Coastal Plain of the United States. His fossil oyster (*O. gigantissima*) from the rich bed of shells at Shell Bluff, on the Savannah River, Georgia, foretold and led the fertile array of discoveries of Paleocene and Eocene molluscan remains from the pits of New Jersey; the bluffs of the Chesapeake Bay; quarries of Georgia, of North Carolina, and Florida; exposures in South Carolina, particularly on the Santee River; the banks of the Tombigbee and Alabama Rivers of Alabama; the banks of Little Stave, Garland, and Town Creeks, Mississippi; the Arkansas and Saline Rivers, and Little Crow Creek of Arkansas; the Ouachita and Red Rivers of Louisiana; the Sabine, Brazos, Trinity, and Colorado Rivers of Texas to the Rio Grande. The preservation of the fossils of the animals which lived along the strand line of the province of the Atlantic Coast, of the Floridian transgression, and of the Mississippi embayment provide an extraordinary means of depicting the biologic, geographic, and geologic history of the species. The abundance of the shells makes

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excellent guides to the stratigraphic horizons. Because the main western extent of the Paleocene and Eocene faunas remained within the confines of the greater Mississippi embayment during the rise and fall of the shore line of the stages, the changes in the biologic character of the faunas may be traced.

Alternating marine spread with uplift which allowed fresh-water conditions occurred during the greater units from the Midwayan through the Jacksonian times. Changing habitats are reflected in the occurrence and character of the fossils. Fortunately the fossils are abundantly preserved. Unique stocks with potential sturdy factors in certain genera furnish evidence of evolutionary development when interpreted by careful shell analysis and their stratigraphic age. Conspicuous are the lines of *Venericardia-Venicor*, *Ostrea*, *Athleta*, *Calyptrophorus*, *Lapparia*, *Pseudoliva*, *Caricella*, and *Bullia*. The extent of specimens in other groups, as yet not critically studied from such a standpoint, will provide excellent material for additional reviews. This catalogue is aimed to assemble the basic facts so that such researches may be suggested and accelerated. The senior author is engaged in monographing the molluscan fauna of the upper Eocene Ocala group of Florida and Georgia, the origin of which is Tethyan (Richards and Palmer, 1953; Palmer and Richards, 1954; Palmer, 1957) with the majority of the species new. This index has organized the information which is necessary before authentic specific and generic determinations can be made through research on such new forms or revision of the old faunas in the Atlantic and Gulf coastal regions.

Amongst the pioneer work on the paleontology of the lower Cenozoic the name of Timothy A. Conrad is preeminent. His descriptions of Eocene fossils began in 1830 on shells from Maryland and extended to 1875 with those new genera and species from North Carolina. His studies of fossils ranged from New Jersey to the Ouachita River in Louisiana and the Rio Grande, Texas. He (1832-35) and Isaac Lea (1833) first depicted the splendid fossils from the well-known layer (Gosport sand) of the middle Eocene at Claiborne Bluff on the Alabama River. In 1890 Marquis Antoine de Gregorio of Palermo, Sicily, produced an elaborate tome of 316 pages and 46 plates of the fossils from that famous landmark (see Wheeler, 1935). Harris, 1896 documented the Midway mollusks and in 1897(b) and 1899(a) those of the lower Eocene Wilcox (Sa-

bine) group. In 1919 Harris enumerated and illustrated the pelecypods of the middle Eocene, in 1937 the turrids (Gastropoda) and Palmer (1937) did the gastropods. Harris (1946) and Palmer (1947), monographed the Jackson, upper Eocene molluscan fauna. Harris' contributions include numerous other pertinent papers on the Eocene, both paleontologic and stratigraphic on the fossils from Maryland to Texas, always with the aim of providing tools toward a continued elucidation of the early Cenozoic of the South. The names are many who have added and are adding to the knowledge of these faunas. Outstanding are: Aldrich (1886-1931), Clark and Martin (1901), Gardner (1935, 1939a, and 1945), Gardner and Bowles (1939), Bowles (1939), Stenzel (1942, 1947, 1949), Stenzel and Turner (1940, 1942), Stenzel, Krause, and Twining (1957), Fisher, Rodda, and Dietrich (1964). Besides the larger contributions, smaller papers which added to the conception of the molluscan fauna, were important but minor in extent. These were mainly studies by Gabb, Heilprin, Meyer, Meyer and Aldrich, Vaughan, Casey, Miller, Miller and Thompson, Richards, and Cooke.

Paralleling and interrelating the biologic descriptions have been the field researches of the stratigraphic and geologic development of the interpretation of the Paleocene and Eocene history. Harris in his *Bulletins* (1896, 1897b) on the Midway and lower Eocene presented a brief historical resumé of the geologic work of the southern Tertiary in the various southern states. Stenzel, Krause, and Twining (1957) performed a service in endeavoring to reconcile and complete old data of the Texas area with modern interpretations. Murray (1961) has provided in his comprehensive compendium the historical summary and modern interpretations of the "Geology of the Atlantic and Gulf Coastal Province of North America." The general nature of the early Cenozoic is known and agreed upon, but the interpretation of relation and value of time and rock units are still debatable and are in minor disagreement. The general faunal stratigraphic significance is apparent, yet there is a vast amount of excellent material available for studies to be made at the generic and specific levels including revised generic determination and evaluation, ontogenetic studies, more concise generic determinations for stratigraphic and geographic guides, as well as dissertations on origin and migration of the fauna.

## PURPOSE

The purpose of this project is to bring together concisely the basic information of the Paleocene and Eocene molluscan fossils and their associated sediments. We feel that before studies are continued on the species that an evaluation of each form should be made in terms of its original description with reference to type specimen, type locality, and type range. Those are fundamental to understanding the true facts of any fossil species. Without consideration of these controls misleading deductions may be made and the value of the fossil as a means of stratigraphic determination is reduced. It has been our aim to make available this information compactly yet as completely as possible. The evaluation of the record has been made from long experience with Paleocene and Eocene fossils in the field and laboratory and with the literature involved. It is hoped that the publication of these data will facilitate future researches.

## PROCEDURE

Because of the extensive size of this book, in order to include as much pertinent information as possible, complete references are not written in the text. They are designated by author and year. The full reference will be found in the *Literature Cited*. For uniformity in the final form all Roman numbers as in the original reference are converted, except in certain cases, to Arabic.

Lists of identified species in stratigraphic papers, with certain exceptions, are not included in the synonymies. One cannot decide from a list how authentic the determination is. Therefore, without examining the specimens such species could not justifiably be placed in synonymy. Some identifications, judged from our experience, have been marked as incorrect. Equally others have been questioned, and some have been indicated as compared (cf.) to the species. This means that further examination as worth while is suggested. Some lists, such as Aldrich, 1886, Heilprin, 1884b, 1891a, Kennedy, 1895, Vaughan, 1896, Dumble, 1894, Trowbridge, 1923, Deussen, 1924, and Cooke, 1915, 1929, 1945, Perrilliat Montoya, 1963, have been evaluated in part. Numerous lists have not been considered for the reason stated.



In many cases, we doubt the extension of many species through several stratigraphic stages. In some instances lumping of the species was because the early paleontologic identification was not so discriminating as that by later workers who had the advantage of more extensive collections, additional stratigraphic knowledge, and greater library facilities. In those cases we have employed the method of indicating such forms other than the typical by using the abbreviation "sp." following the generic name. We feel that this will call the problem to the attention of future students so that the typical species can be used with greater stratigraphic value. Future work may unite the forms but should not be done without particular and critical judgment.

In the citation of family group name, the name commonly used, unless there is some evidence to the contrary, is included. We do not feel that it is necessary, valuable, or useful in a compendium of this nature to follow the International Code of Zoological Nomenclature (1961) to search for the oldest family group name. In most cases it would entail a large amount of busy work of which there would be no real value to our study. The use of many family group names of earliest origin over that of the type genus without extensive explanation would lead to confusion.

Because the purpose of this project is to bring together the molluscan species of the Paleocene and Eocene with their typical locality, range, and their historical description, special taxonomic inquiry has not been made of each generic category. Such work would require monographic study of each genus which time does not permit. Our plan is to present basic facts for such future generic studies. Many of the genera which we have marked "cf." to known genera probably are new forms, both or either from their nontypical character and range. It is not the place in this catalogue to describe new genera or species. We feel that the fundamental research involved in our studies is essential for a true paleontologic and stratigraphic delineation and important to improve the value of the fossil occurrence.

## SPECIAL COLLECTIONS

Effort has been made in this work to locate type material so



that investigators will have ready information available for original research and verification. We are indebted to a host of persons, to whom we gratefully acknowledge their splendid cooperation in the search for these specimens and for the catalogue numbers of the respective institution or pertinent data involved in connection with a specimen. Particular collections are:

*De Gregorio Alabama collection.*—In 1890, Antoine de Gregorio of Palermo, Sicily, published a pretentious monograph of the molluscan fossils of the Gosport sand, the material of which he had received from the famous Claiborne Bluff, Monroe County, Alabama. Because De Gregorio had described and figured as new species and "varieties" from Claiborne Bluff, their identity constituted a problem to American investigators of the southern Eocene. After inquiry in 1937 (Palmer, 1937), the type and figured shells were reported to be in the DeGregorio home in Palermo. In 1945 (Palmer, 1945) the specimens had been deposited at the University of Palermo. When information concerning the suite was sought in 1957 the material was reported to be badly mixed and in irreplaceable condition. Through the splendid cooperation of Dr. G. Ruggieri of the Istituto di Geologia dell Università, Palermo, about 32 of the types were located and turned over to the Paleontological Research Institution. The specimens have been catalogued (Nos. 26426-26457) and that information is included in this catalogue.

| PRI No. | Specific Name                             | Reference                                             |
|---------|-------------------------------------------|-------------------------------------------------------|
| 26444   | <i>Cerithium misgum</i>                   | p. 118, pl. 10, fig. 29, holotype                     |
| 26442   | <i>Turritella mela</i>                    | p. 127, pl. 11, fig. 40, holotype                     |
| 26440   | <i>Turritella carinifera tiga</i>         | p. 126, pl. 11, fig. 22, holotype                     |
| 26441   | <i>Turritella litripa</i>                 | p. 125, pl. 11, fig. 20, holotype                     |
| 26438   | <i>Turritella apita</i>                   | p. 123, pl. 11, fig. 8, holotype                      |
| 26443   | <i>Solarium perinum</i>                   | p. 137, pl. 12, figs. 49-52, syntypes                 |
| 26445   | <i>Solarium supravenustum</i>             | p. 137, pl. 12, figs. 54a-56, holotype                |
| 26433   | <i>Triton grassator</i>                   | p. 96, pl. 7, fig. 41, syntype                        |
| 26431   | <i>Murex stetopus</i>                     | p. 96, pl. 7, fig. 34, holotype                       |
| 26447   | <i>Pleurofusua longirostropsis</i>        | p. 34, pl. 2, figs. 26, 27 not type (3 spec. turrids) |
| 26434   | <i>Rostellaria quidest</i>                | p. 115, pl. 10, figs. 1-2a, b, holotype               |
| 26426   | <i>Voluta Sayana</i> var. <i>ipnotica</i> | pp. 64, 65, pl. 5, figs. 1, 2 holotype                |

|       |                                                       |                                                                         |
|-------|-------------------------------------------------------|-------------------------------------------------------------------------|
| 26435 | <i>Voluta pyruloids</i> var. <i>sita</i>              | pp. 67, 68, pl. 5, figs. 15, 16, syntypes                               |
| 26428 | <i>Voluta cogitabunda</i>                             | p. 66, pl. 5, figs. 10b, c, syntype                                     |
| 26432 | <i>Voluta Sayana</i> var. <i>mica</i>                 | pp. 64, 65, pl. 5, figs. 3, 4, holotype                                 |
| 26437 | <i>Voluta teplica</i>                                 | p. 65, pl. 5, fig. 7, holotype                                          |
| 26430 | <i>Pseudoliva vetusta</i> var. <i>moerens</i>         | p. 109, pl. 8, figs. 39, 40, holotype                                   |
| 26439 | <i>Terebra andrega</i>                                | p. 17, pl. 1, figs. 43, 44, not type                                    |
| 26446 | <i>Mitra fusoides lepa</i>                            | p. 72, pl. 5, figs. 34-36, syntypes                                     |
| 26429 | <i>Mitra dubia</i> (H. C. Lea)                        | p. 75, pl. 5, figs. 56a, 57b, hypotype                                  |
| 26427 | <i>Mitra subconquisita</i>                            | p. 76, pl. 5, figs. 50, 51, syntypes                                    |
| 26436 | <i>Conus deperditus</i> var. <i>subdiadema</i>        | p. 20, pl. 1, fig. 57, holotype                                         |
| 26454 | <i>Pectunculus deltoideus</i> mut. <i>percuneatus</i> | p. 194, pl. 23, figs. 38-41, syntypes                                   |
| 26453 | <i>Pectunculus deltoideus</i> mut. <i>ignus</i>       | p. 194, pl. 23, fig. 36, syntype [also fig. 34 not <i>Pectunculus</i> ] |
| 26456 | <i>Pectunculus deltoideus</i> mut. <i>ignus</i>       | p. 194, pl. 23, fig. 34, not <i>Pectunculus</i> , syntype               |
| 26452 | <i>Lucina impressa</i> var. <i>subcuneata</i>         | p. 203, pl. 28, figs. 12, 13, holotype                                  |
| 26455 | <i>Lucina impressa</i> var. <i>sublaevigata</i>       | p. 203, pl. 28, fig. 10, holotype                                       |
| 26457 | <i>Lucina papyracea</i> Lea                           | p. 205, hypotype                                                        |
| 26451 | <i>Cytherea acquorea</i> mut. <i>subvitrea</i>        | p. 216, pl. 33, figs. 16-21, syntypes                                   |
| 26450 | <i>Cytherea aequorea</i> mut. <i>cominduta</i>        | pp. 216, 217, pl. 34, figs. 5, 6 syntypes                               |
| 26448 | <i>Corbula ignota</i>                                 | p. 232, pl. 37, figs. 15-18, syntypes                                   |
| 26449 | <i>Teredo simplexopsis</i>                            | p. 236, pl. 38, figs. 26a, b, holotype                                  |

*James M. Safford collection.*—In 1860, William Gabb (1860d) described molluscan species which had been collected by James M. Safford, State Geologist of Tennessee, from Hardeman County, Tennessee. G. D. Harris in 1896 (pp. 6, 52) examined the types which had been loaned to him. Harris described and refigured the shells of certain species and stated that a few were missing. He noted (1896, p. 68) that the Safford Collection was at Vanderbilt University, Nashville, Tennessee. Though repeated inquiries to Nashville have been made during the course of this work no information concerning the specimens has been obtained. Although Edgar Bowles, 1939 (pp. 309, 334) stated that the Safford Collection was at Vanderbilt, Dr. Bowles (per. com. Mar. 9, 1964) has no knowledge of the material. Other investigators whose work has come in association with the Safford material have been contacted. The whereabouts of the collection remains an enigma.

*Chas. Lyell North Carolina Eocene collection.*—After Sir Charles Lyell's first visit to America (1841) he published papers on a few American fossils. Of particular interest to the Eocene material were those from near Wilmington, North Carolina. Brief discussions with text figures were published by Lyell (1845). L. R. Cox of the British Museum (Natural History) has been in the act of tracing the specimens. Part of the material is in the Oxford University Museum and some is at the Lyell home, Kinnordy, Kirriemuir, in Forfarshire, Scotland. Mr. J. M. Edmonds has located types at Oxford.

*Early Texas Eocene collection.*—In 1892 and 1893, G. D. Harris was employed as Tertiary paleontologist to the Geological Survey of Texas. During that time he prepared a 415 page manuscript with descriptions and drawings illustrating new species. This manuscript was never published in complete form. In 1895 Harris extracted the descriptions and figures of certain species, and they were published in the Proceedings of the Academy of Natural Sciences of Philadelphia. He included discussion and localities of other species in 1919 in Bulletin of American Paleontology (No. 31). The localities were listed only by brief name and in some cases several localities accompanied the description of the species without an indication of the locality of the type. The Harris manuscript, preserved in the Paleontological Research Institution, includes the list of stations of the collections of the Texas material and also includes the station number of the locality of the type specimen. By checking the station number with the locality list, the type locality of the species is determined. This has been an important means of identifying the type age and providing stratigraphic value to the fossil. A brief notation of this information accompanies the citation of the species herein.

Stenzel, Krause, and Twining (1957) in carefully searching the labels and records of the early Texas Geological Survey have added pertinent and corrective interpretation to many of the obscure localities.

Through the help of Peter U. Rodda of the Bureau of Economic Geology of the University of Texas, the information of the present whereabouts of the types under discussion has been ob-

tained. These data include those at the Geology Department and the Bureau of Economic Geology of the University of Texas, and those which are now missing or not located.

*R. P. Whitfield's descriptions of T. J. Hale collection.*—R. P. Whitfield (1865) in the American Journal of Conchology (vol. 1, pp. 259-268, pl. 27) described various species, the material of which had been collected by Rev. T. J. Hale of Madison, Wisconsin, when in Alabama. The collection was supposed to have come from Alabama and Mississippi. Many of the localities enumerated by Whitfield proved erroneous because the localities had not been carefully differentiated as to place or age. Aldrich (1887, pp. 79-81), who was thoroughly familiar with the localities and fossils of the southern Eocene, corrected the data, mostly by species. Attention is called by us to Aldrich's notes and the rectification of the locality and age is made under the respective species. The collection apparently belonged to James Hall and eventually went to the University of Chicago. It is now at the Chicago Natural History Museum.

*I. Lea Claiborne, Alabama, collection.*—I. Lea described and figured new species of mollusks in "Contributions to Geology," published privately, 1833, from the Gosport sand at Claiborne, Alabama. The specimens were given to the Academy of Natural Sciences of Philadelphia. In 1895c G. D. Harris rearranged and catalogued the collection which had previously been organized by Angelo Heilprin. The original notebook in which Harris wrote out the names of the species with the catalogue number of the type specimens is in the Paleontological Research Institution. The catalogue numbers of those types as registered by Harris are inserted in this text with the corresponding species.

## MISCELLANEOUS STRATIGRAPHIC NOTES

*Kinkaid formation versus Kincaid formation.*—The name Kinkaid formation, Weller, 1920 (Jour. Geol., vol. 28, No. 5, p. 405) for a Mississippian formation of Illinois and Kentucky might be confused with the name Kincaid formation Gardner, 1933 (A.A.P.G., Bull., vol. 17, No. 6, p. 144), Midway group, Paleocene

of Texas. The difference in spelling is particularly vulnerable if careful proof reading is not available in publication.

*Logansport formation.*—The formational name "Logansport" used in Barry and LeBlanc (1942 +) is preoccupied and should be renamed if important to use. The name was introduced in 1941 for an Eocene formation by Murray (A.A.P.G., Bull., vol. 25, No. 5, p. 941) in an abstract with no definition of a type locality. In 1941 Cooper and Warthin (Washington Acad. Sci., Jour., vol. 31, No. 6, p. 259) introduced the name Logansport limestone for a Middle Devonian formation in Indiana. It was not until 1945 when Murray and Thomas (A.A.P.G., Bull., vol. 29, No. 1, pp. 57-58) defined Logansport formation, Paleocene of Louisiana, that the name received validity. Hence the name Logansport limestone preoccupies that of the name in the Paleocene (Wilson, *et al.*, 1957, U.S.G.S., Bull. 1056A, p. 214; Fisher, 1961, p. 277).

*Gosport sand—Moody's Branch formation.*—It is unfortunate that in Bowles' (1939) *Turritella* monograph, the Gosport sand is converted to Moodys Branch which places the formation in the Jackson group, upper Eocene, instead of the uppermost middle Claiborne group or middle Eocene. The Gosport sand and its fauna is distinct from that of the Moodys Branch with certain species confined to each formation. Therefore, it is misleading to those who are unfamiliar with the paleontology and stratigraphy of each formation to have one placed equal to the other without a distinguishing explanation. To say that *Turritella apita* de Gregorio, *Turritella carinata* I. Lea, and *Mesalia vetusta* (Conrad), which are unique in the Gosport sand, are Moodys Branch, Jackson Eocene, is obscuring the true facts of their occurrence.

*Age of "Showalter" Alabama material.*—In 1860 (p. 291) Conrad described several species as given to him by Dr. Showalter of Uniontown, Alabama, "from a locality further north in Alabama than any Mr. Tuomey had explored." This statement was too ambiguous to be of value. Through the effort of Aldrich and Harris the age of several species has been determined (Harris, 1899a, p. 44).

*A. C. Veatch surveys in Louisiana.*—In 1900-1902 when A. C. Veatch was Assistant Geologist to G. D. Harris, Geologist-in-charge, of the Louisiana Geological Survey, several traverses were made by



him on rivers and areas in Louisiana, particularly on the Ouachita and Sabine Rivers. Excellent collections were made by him and tied in to the sections. The specimens were utilized in description and discussion of species especially by Harris (1919, 1937), Palmer (1937), and Harris and Palmer (1946, 1947). Sections were published in *Geology of Louisiana* (see Veatch, 1902), and the books are available. Those notes elucidate many obscure points and should be consulted by all students of the fauna and stratigraphy of the Eocene of the Gulf Coastal Plain.

*Pendleton formation.*—The name Pendleton formation (Wasem and Wilbert, 1943, *Jour. Paleont.*, vol. 17, pp. 181-195) is pre-occupied by the same name Pendleton sandstone (Kindle, 1901, *Indiana Dept. Geol. Nat. Res.*, 25th Ann. Rept., pp. 558-561), Devonian of Indiana. The name Pendleton Ferry formation was presented by Murray and Thomas (1945, *A.A.P.G.*, *Bull.*, vol. 29, No. 1, p. 56) as a substitute for Pendleton formation Wasem and Wilbert for the lower Eocene, Wilcox [Sabine] group of Texas and Louisiana. We are using the name Pendleton Ferry formation.

*Gabb's material from Caldwell "Co." and Wheelock, Texas.*—Gabb (1860d) described species from Texas at localities he called Caldwell "Co." and Wheelock. The location of the places has been a dilemma until Stenzel, Krause, and Twining, 1957, pp. 10, 11, made a plausible explanation deducing that Wheelock was the old settlement in Robertson County, Texas, (see Wheelock member, Cook Mountain formation) and that Caldwell "Co." was a mistake for Caldwell, Burleson County, Texas, Stone City beds.

*Conrad, 1865, Eocene shells from Enterprise, Mississippi.*—Conrad in 1865b (pp. 137-141) described a suite of fossils which he said was collected from "Enterprise, Clarke Co., Miss." by Dr. William Spillman. The set contained those which are typically Jackson upper Eocene and not characteristic of the sediments at Enterprise, Mississippi, which are Claibornian or middle Eocene. Aldrich long ago (1885c, p. 307) corrected the error. Dr. Spillman wrote Aldrich (Aug. 14, 1884) that he had not sent Conrad any specimens from Enterprise but had presented him with fossils from Garland's Creek, three miles east of Shubuta, Clarke County, Mississippi. This solved the problem.

*Lisbon formation.*—The name Lisbon formation Aldrich, 1886,

is preoccupied by the Ordovician or Cambrian formation Hitchcock, 1874. See glossary of stratigraphic terms in this catalogue.

*Wilcox [Sabine] group.*—See [Sabine gr.] formation in glossary of stratigraphic terms used in this catalogue.

## LOCATION OF TYPE SPECIMENS BY AUTHOR AND DATE

(For depository and catalogue number, see under each species)

Aldrich, T. H.

1885a, 1885b, 1885c, 1886, 1887, 1890, 1894a, 1894b, 1895a, 1895b, 1897a, 1897b, 1898, 1901b, 1903, 1907, 1908a, 1908b, 1910a, 1910b, 1911 USNM (formerly JHU, transferred to USNM, 1962); 1895b JHU; 1894b, 1903a, 1921, 1931 GSATC; 1904 CNHM; 1911, 1919 (Harris) PRI

Barry, J. O.

1942+ LSU Pal. Mus.

Bowles, E. O.

1934 USNM; 1939, 1939 (with Gardner) USNM

Brown, A. P., and Pilsbry, H. A.

1912 ANSP

Call, R. E.

1891. Unknown

Casey, T. L.

1902a, 1902b, 1903, 1904 USNM

Chavan, A. *in* Palmer, K. V.W.

1937 Lab. Géol., Sorbonne, Paris

Clark, W. B.

1895 JHU; 1896, JHU, USNM, ANSP

Clark, W. B., and Martin, B. L.

1901 JHU (formerly Maryland Geol. Sur.); 1901 ANSP

Collins, R. E. L.

1934 USNM

Conrad, T. A.

1830, 1832b, 1833a, 1833b, 1833c, 1834, 1834a, 1835b, 1841, 1842b, 1843, 1844, 1845b, 1846b, 1846c, 1848a, 1848b, 1850, 1853, 1853a, 1854, 1856b, 1860, 1863a, 1864, 1865b, 1865e, 1867c, 1868, 1869b, 1872 ANSP (See Moore, 1962); 1857, 1865a, USNM; 1869b Rutgers (lost)

Cooke, C. W.

1926b USNM

Cope, E. D.

1866 ANSP

Cossmann, M.

1893 Lab. Géol., Sorbonne, Paris

Dall, W. H.

1890-1903a USNM; 1900 ANSP; 1903a PRI

- Finch, J.  
1824 ANSP
- Gabb, Wm. M.  
1860a, 1860b, 1860d, 1862a, 1862c, 1877 ANSP; 1862a USNM; 1860d formerly Vanderbilt Univ. No information available in 1962, 1963.
- Gardner, Julia A.  
1923, 1927, 1935, 1945, 1951 USNM
- Gardner, Julia A., and Bowles, E.  
1939 USNM
- Gregorio, Antoine de  
1890. PRI or lost. See under type collections.
- Harbison, Anne  
1944 ANSP
- Harris, G. D.  
1894b, 1895a, 1896, 1897b, 1919 USNM; 1895a, 1895b, 1896, 1897b, 1898, 1899a, 1919, 1946, 1951 PRI; 1895a, 1896, 1919 BEG; 1896, 1897a, 1897b, 1946 ANSP; 1919 GSATC; 1951 Fla. Geol. Sur.
- Harris, G. D., and Palmer, K. V. W.  
1946, 1947. See under each author
- Heilprin, Angelo  
1881 GSATC, ANSP; 1891a BEG; 1865 CNHM
- Hughes, R. J., Jr.  
1961 USNM
- Johnson, C. W.  
1904 ANSP
- Kellum, L. B.  
1926 USNM
- Kent, L. S.  
1960 PRI
- Langdon, D. W., Jr.  
1886 USNM
- Lea, H. C.  
1841 ANSP
- Lea, I.  
1833 ANSP. Catalogued by G. D. Harris in 1895c, unpublished list. Original notes ANSP and PRI
- Le Blanc, R. J.  
1942+ LSU Pal. Mus.
- Lyell, Chas.  
1845. Unknown. See under type collections
- MacNeil, F. S.  
1934, 1951 USNM
- Martin, B. L.  
1901 JHU. See Clark, W. B., and Martin, B. L.
- Meyer, Otto  
1884, 1885a, 1886b, 1887a USNM; 1885a GSATC
- Meyer, O., and Aldrich, T. H.  
1886 USNM

- Miller, A. K.  
1947 USNM
- Miller, A. K., and Thompson, M. L.  
1933 JHU, GSATC, Univ. Iowa; 1935 ANSP
- Morton, S.  
1828b, 1830a, 1833a, 1833b, ANSP
- Owen, D. P.  
1860 USNM
- Palmer, K. V.W.  
1919, 1927/29, 1928, 1937, 1947 PRI; 1944 GSATC; 1944 ANSP
- Palmer, K. V.W. *in* Richards, H. G., and Palmer, K. V.W.  
1953 Fla. Geol. Sur.
- Palmer, K. V.W. *in* Price, W. A., and Palmer, K. V.W.  
1928 PRI
- Plummer, F. B.  
1933 BEG
- Reeside, J. B., Jr.  
1924 USNM
- Renick, B. C., and Stenzel, H. B.  
1931 BEG
- Richards, H. G.  
1946, 1947, 1948, 1950 ANSP; 1953 Fla. Geol. Sur.
- Rogers, W. B., and Rogers, H. D.  
1837 unknown; 1839b MCZ (see list by Cushman, 1907)
- Sheldon, P. G.  
1917 USNM
- Stenzel, H. B.  
1935, 1939, 1940a, 1957 BEG
- Stenzel, H. B., and Krause, E. K.  
1957 BEG
- Stenzel, H. B., Krause, E. K., and Twining, J. T.  
1957 BEG
- Stenzel, H. B., and Turner, F. E.  
1940 BEG
- Stenzel, H. B., and Twining, J. T.  
1957 BEG
- Stewart, R. B.  
1930 ANSP
- Tuomey, M.  
1853 unknown; 1854 neotype, Univ. Iowa
- Tucker-Rowland, H. I.  
1931, 1934, 1936b PRI; 1931, 1934, 1938 CNHM
- Trowbridge, A. C.  
1932 USNM
- Van Winkle, K. [Palmer]  
1919, 1921 PRI

Vaughan, T. W.  
1896 USNM

Vokes, H. E.  
1964 USNM

Weller, S.  
1907 State Mus., Trenton, N.J.

Wheeler, H. E.  
1910 USNM

White, C. A.  
1882 USNM

Whitfield, R. P.  
1869b, 1885, 1892, 1905, AMNH, 1885 State Mus., Trenton, N.J., 1865, 1892  
CNHM

## DEPOSITORIES

AMNH American Museum of Natural History, New York, N.Y.

ANSP Academy of Natural Sciences of Philadelphia, Pa.

BEG Bureau of Economic Geology, University of Texas, Austin, Texas

BM(NH) British Museum (Natural History), London, S.W. 7, England

BSNH Boston Society of Natural History, Boston, Mass. (Transferred to MCZ)

Charleston Mus. The Charleston Museum, Charleston, S. C.

Columbia University, New York, N.Y. See AMNH Types were deposited in the AMNH.

CNHM Chicago Natural History Museum, Chicago, Ill. (formerly Walker Museum, University of Chicago)

Fla. Geol. Sur. Florida Geological Survey, Tallahassee, Fla.

Geol. Dept. State Univ. Iowa Geology Department, State University Iowa, Iowa City, Iowa

Geology Department, Johns Hopkins University, Baltimore, Md. (formerly Maryland Geological Survey). USNM, 1965

GSATC Geological Survey of Alabama, Type Collection, University, Ala. (formerly Alabama Museum of Natural History)

Lab. Geol., Sorbonne, Paris Laboratoire de Géologie de la Faculté des Sciences Université de Paris (Sorbonne), Paris, France

LSU Pal. Mus. Louisiana State University, Paleontological Museum, Baton Rouge, La.

MCZ Museum of Comparative Zoology, Harvard University, Cambridge, Mass.

OUM Oxford University Museum

PRI Paleontological Research Institution, Ithaca, N.Y.

Rutgers Univ. Rutgers University, New Brunswick, N.J.

Safford Coll. Vanderbilt University, Nashville, Tenn. [not found]

State Mus. Trenton, N.J. State Museum, Trenton, N.J.

Univ. Ill. Geology Department, University of Illinois, Urbana, Ill.



Univ. Palermo University of Palermo, Palermo, Sicily

USNM United States National Museum, Washington, D.C.

Wagner Free Inst. Sci. Wagner Free Institute of Science of Philadelphia, Pa.

## ABBREVIATIONS

The greater number of abbreviations used are the common geographical forms and need not be indicated here.

|            |                              |
|------------|------------------------------|
| clay       | cl.                          |
| formation  | fm.                          |
| group      | gr.                          |
| Landing    | Ldg.                         |
| limestone  | ls.                          |
| marl       | ml.                          |
| manuscript | ms.                          |
| member     | mem.                         |
| sand       | sd.                          |
| sandstone  | ss.                          |
| sp., spp.  | species, singular and plural |
| sp. indet. | species indeterminate        |
| young      | yg.                          |

Cf. [*confer*, to be compared to] before a generic name indicates the genus is compared to. Cf. after a generic name indicates that the species is compared to.

A question mark placed after a generic name indicates that the genus is questioned; when placed after the specific name the specific determination is questioned.

*sic* thus, indicates the exact spelling which is incorrect

MOLLUSCA  
PELECYPODA**Abra (Abra) nitens (Lea)****Semelidae**

*Egeria nitens* Lea, 1883, p. 51, pl. 1, fig. 19; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 30

*Mysia nitens* (Lea), Conrad, App. in Morton, 1834, p. 7; Conrad, 1865a, p. 9

*Amphidesma tellinula* Conrad, App. in Morton, 1834, p. 8; Conrad, 1835a, Harris reprint, 1893, p. 115, pl. 19, fig. 12; Conrad, 1846c, p. 397, pl. 4, fig. 5; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 377; Harris 1895b, p. 45

*Abra nitens* (Lea), Conrad, 1865a, p. 5; Conrad, 1866a, p. 7 Conrad as author; Dall, 1900, pp. 996, 1015; Harris, 1919, p. 173, pl. 52, figs. 11-13; Brann and Kent, 1960, p. 19

*Abra tellinula* (Conrad), Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; Harris, 1895b, p. 45

*Tellina nitens* (Lea), de Gregorio, 1890, p. 223 in part, pl. 35, pl. 17 copy Lea, not figs. 13-16 = *T. cossmanni* Dall, 1900, p. 997; Cossmann, 1893, p. 8

*Syndesmya* [sic] *tellinula* (Conrad), Cossmann, 1893, p. 8, pl. 1, figs. 7, 8

*Abra (Abra) nitens* (Lea), Stenzel, Krause, and Twining, 1957, p. 119

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes, Nos. 5092, 5093 ANSP; *Amphidesma tellinula* Conrad probable holotype, No. 20263 ANSP Moore, 1962, p. 101

**Abra (Abra) nitens jacksonica Harris****Semelidae**

*Abra nitens* (Lea) var. *jacksonica* Harris in Harris and Palmer, 1946, p. 105, pl. 22, figs. 22-24; Brann and Kent, 1960, p. 19

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: Hinds Co., Moody Branch, Jackson (type)

*Types*.—Holotype, No. 4380; paratype, No. 4381 PRI

**Abra (Abra) petropolitana Stenzel****Semelidae**

*Abra (Abra) petropolitana* Stenzel in Stenzel, Krause, and Twining, 1957, p. 119, pl. 12, figs. 1, 2; text fig. 19

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

*Type*.—Holotype. No. 20673 BEG

*Abra tellinula* (Conrad)

See *Abra (Abra) nitens* (Lea)

**Acanthocardia (Schedocardia) hatchetigbeensis (Aldrich)****Cardiidae**

*Cardium hatchetigbeense* Aldrich, 1886, p. 39, pl. 4, figs. 12, 12a, 12b; de Gregorio, 1890, p. 216, pl. 33, figs. 2-4 copies Aldrich; Cossmann, 1893, p. 10; Harris, 1897b, p. 59, pl. 12, figs. 2, 2a copies Aldrich; ? fig. 3; Dall, 1900, p. 1080; Trowbridge, 1932, pl. 39, fig. 8 syntype; Brann and Kent, 1960, p. 174 C. ? *hatchetigbeense*

*Plagiocardium* (*Schedocardia*) *hatchetigbeeense* (Aldrich), Stewart, 1930, p. 255

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox [Sabine] gr.

*Localities*.—ALA.: *Washington Co.*, Hatchetigbee Bluff, Tombigbee R. (type). TEXAS: *Sabinetown Co.*, ? Sabinetown, Sabine R. (Harris)

*Types*.—Syntypes, No. 638802 (fig. 12b) USNM

***Acanthocardia* (*Schedocardia*) *tuomeyi* (Aldrich)**

**Cardiidae**

*Cardium vicksburgense* Tuomey, 1858, pp. 264, 269

*Cardium tuomeyi* Aldrich, 1886, p. 40, pl. 4, figs. 13, 13a; de Gregorio, 1890, p. 216, pl. 33, figs. 1a, 1b copy Aldrich; Cossmann, 1893, p. 11; Harris, 1897b, p. 60, pl. 12, fig. 4; Harris, 1899b, p. 303 in part, not pl. 53, figs. 9, 10 see cf. *Plagiocardium* sp.; Dall, 1900, p. 1080; Trowbridge, 1932, pl. 39, figs. 6, 7 type; Brann and Kent, 1960, p. 179

Not *Cardium tuomeyi* Aldrich, Sutton, 1946, p. 1681; not Brann and Kent, 1960, p. 179

*Cardium* (*Cerastoderma*) *tuomeyi* Aldrich var., Barry, 1942+, p. 66, pl. 9, fig. 1; not pl. 8, figs. 4-6 see cf. *Plagiocardium* sp.

*Range*.—Lower Eocene. Nanafalia fm. (type), lower Wilcox [Sabine] gr. Marthaville fm., lower Wilcox [Sabine] gr.

*Localities*.—ALA.: *Marengo Co.*, Nanafalia Ldg., Tombigbee R. (type). GA.: *Clay Co.*, Fort Gaines. LA.: *Sabine Par.*, rd. cut along La. Highway 26 on W. F. Skinner's farm, 2¼ mi. S. of Belmont; *Natchitoches Par.*, Marthaville

*Type*.—Holotype, presumably USNM

***Adrana aldrichiana* Harris**

**Nuculanidae**

*Leda* (*Adrana*) *aldrichiana* Harris, 1895a, p. 47, pl. 1, fig. 6

*Adrana aldrichiana* Harris, 1919 p. 71, pl. 25, figs. 20(?), 21; Gardner, 1945, p. 49; Brann and Kent, 1960, p. 29

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.; Laredo fm. (Gardner, Mexico), upper Claiborne gr.

*Localities*.—TEXAS: *Brazos Co.* [or *Burleson Co.*], 1½ mi. below Moseleys Ferry [Stone City Bluff], Brazos R. (type). ? LA.: *Bossier Par.*, Roberta. Mexico; See Gardner, 1945, p. 49

*Type*.—Holotype, No. 638971 USNM

*Aequipecten* (*Cyclopecten*) *alabamensis* Aldrich

See *Amusium* (*Propeamusium*) *alabamense* (Aldrich)

*Aequipecten* (*Nodipecten*) *anatipes* (Morton)

See *Flexopecten anatipes* (Morton)

*Aequipecten* (*Cyclopecten*) *calvatus* (Morton)

See *Eburnopecten calvatus* (Morton)

*Aequipecten centrotus* (Dall)

See *Aequipecten perplanus centrotus* (Dall)

*Aequipecten choctawensis* (Aldrich)

See *Chlamys choctawensis* Aldrich

*Aequipecten Deshayesii* (Lea)  
See *Chlamys deshayesii* (Lea)

*Aequipecten (Pseudamussium) frontalis* (Dall)  
See *Eburneopecten frontalis* (Dall)  
See also *Eburneopecten dalli* (Clark)

***Aequipecten perplanus* (Morton) Pl. 1, figs. 8, 9 Pectinidae**

*Pecten perplanus* Morton, 1833a, p. 293, pl. 5, fig. 5; Morton, 1834, p. 58, pl. 5, fig. 5; pl. 15, fig. 8; d'Orbigny, 1850, p. 393; de Gregorio, 1890, p. 182, pl. 21, figs. 30, 31 copy Morton; Shimer and Shrock, 1944, p. 407; Harris and Palmer, 1946, p. 27, pl. 7, figs. 5-11. Not of authors. *P. poulsoni* of authors, not of Morton, 1834, p. 59. Not *P. spillmani* Gabb, 1860d, as of authors

*Aequipecten perplanus* (Morton), Teppner, 1922, p. 169 in part

*Range*.—Oligocene (type)

*Locality*.—ALA.: "Nummulite limestone, from Claiborne, Alabama" (Morton). Type ANSP labelled "St. Stephens limestone, Ala."

*Type*.—Holotype, ANSP [not lost as in Harris, 1946, p. 27]

***Aequipecten perplanus* (Morton) "var." Pectinidae**

*Pecten perplanus* Morton var. Harris, 1951, p. 8, pl. 3, figs. 5-8

*Range*.—Uppermost Eocene. Bumpnose ls.

*Locality*.—FLA.: Jackson Co., Marianna Limestone Products Co., quarry, sec. 23, T. 5 N., R. 11 W., Fla., Geol. Sur. J-5, Wayne Moore, 1955, p. 36

*Types*.—Figured specimens lost

***Aequipecten perplanus centrotus* (Dall) Pectinidae**

*Pecten* [*Aequipecten*] (*perplanus* var. ?) *centrotus* Dall, 1898b, p. 733, pl. 34, fig. 2. Not in Schuchert, *et al.*, 1905

*Aequipecten centrotus* (Dall), Teppner, 1922, p. 148

*Chlamys (Aequipecten) perplanus centrotus* (Dall), Tucker-Rowland, 1938, p. 31, pl. 6, fig. 6 copy Dall

*Range*.—"Eocene (Vicksburgian ?)", Dall, 1898b, p. 733, Eocene or Oligocene

*Locality*.—FLA.: St. Johns Co., Ponce de Leon artesian well, depth 225 ft., St. Augustine (type)

*Type*.—Not found USNM June, 1962

*Aequipecten (Nodipecten) pulchricostus* (Meyer and Aldrich)  
See *Chlamys pulchricosta* (Meyer and Aldrich)

***Aequipecten suwaneensis* Dall Pectinidae**

*Pecten (Aequipecten) suwaneensis* Dall, 1898b, p. 734; Schuchert, *et al.*, 1905, p. 491; Dall, 1916, pp. 488, 492, in part [as *suwaneensis* sic] not Flint River locality, pl. 83, figs. 2-4; Cooke and Mossom, 1929, p. 57 [as *suwaneensis* sic]

*Range*.—Upper Eocene. "Ocala ls.", (type) Ocala gr.

*Locality*.—FLA.: Suwannee Co. (type)

*Type*.—Syntypes, No. 115777 USNM

**Agnocardia claibornensis** (Aldrich)**Cardiidae**

*Cardium* (*Trachycardium*) *claibornensis* Aldrich, 1911, p. 3, pl. 1, fig. 4; Harris, 1919, p. 132, pl. 11, figs. 8 copy Aldrich, 8a as *claibornense*, not 9; Brann and Kent, 1960, p. 173

*Trachycardium* (*Agnocardia*) *claibornense* (Aldrich), Stewart, 1930, p. 264

*Agnocardia claibornensis* (Aldrich), Keen, 1937, p. 4

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.; Gosport sd., uppermost Claiborne gr.

*Localities*.—MISS.: Clarke Co., De Soto (type). ALA.: Monroe Co., Claiborne Bluff, Alabama R. (Harris)

*Type*.—Holotype, No. 639113 USNM

**Agnocardia** sp.**Cardiidae**

*Cardium* (*Agnocardia*) cf. *claibornense* Aldrich, Harbison, 1944, p. 6, pl. 1, figs. 6, 8

*Range*.—Middle Eocene. Santee ls., upper Claiborne gr.

*Locality*.—S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. Moncks Corner

*Type*.—Figured specimen, ANSP

**Alectryonia johnsoni** (Aldrich)**Ostreidae**

*Ostrea johnsoni* Aldrich, 1886, p. 41, pl. 6, fig. 6; de Gregorio, 1890, p. 178; Cossmann, 1893, p. 18; Dall, 1898b, p. 680; Harris, 1919, p. 15, pl. 10, figs. 11-15; Brann and Kent, 1960, p. 635

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—ALA.: "Monroe Co." (type), Claiborne Bluff ("calc. sand-bed") Alabama R.; Lisbon Bluff, Alabama R.; Covington Co., Caton's Bluff, Conecuh R., NNW. of Andalusia. MISS.: Newton Co., Newton (not Ala. as in Dall, 1898b)

*Type*.—Holotype, No. 638808 USNM

**Alectryonia ludoviciana** (Harris)**Ostreidae**

*Ostrea vicksburgensis ludoviciana* Harris, 1919, p. 14, pl. 10, figs. 1-10; ? Harris and Palmer, 1946, pl. 2, fig. 7 not n. var. as on expl. of pl.; Brann and Kent, 1960, pp. 644, 645

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr. ? Upper Eocene. Jackson gr.

*Localities*.—LA.: Natchitoches Par., Chestnut; Natchitoches; (type localities); ? Caldwell Par., Bunker Hill Ldg., Ouachita R.

*Types*.—Syntypes, Nos. 389-397 PRI (fig. 3 lost)

**Alectryonia vicksburgensis mortoni** (Gabb)**Ostreidae**

*Ostrea panda* Morton 1834, p. 51 in part, "var. from Alab.", pl. 19, fig. 10 [not pl. 10 as in Gabb, 1862a]; H. C. Lea, 1849, p. 103; de Gregorio, 1890, p. 178, pl. 19, fig. 8 copy Morton; fig. 9 not copy Morton as stated; Dall, 1898b, p. 682 under *O. vicksburgensis* Conrad

*Ostrea mortonii* Gabb, 1862a, p. 329 [not pl. 19, fig. 10 as in Harbison, 1944]; *O. panda* Morton in part=*O. mortoni* Gabb, Ala.; Heilprin, 1884c, p. 311; de Gregorio, 1890, pp. 176, 177; Dall, 1898b, p. 682 under *O. vicksburgensis* Conrad



*Ostrea vicksburgensis* var. *mortoni* Gabb, Harris, 1919, p. 14; cf. Harbison, 1944, p. 3, pl. 3, fig. 5; Harris and Palmer, 1946, p. 17, pl. 1, fig. 15 copy Morton *O. panda*

*Range*.—Eocene probably upper (type). Middle Eocene. Cf. Santee ls., upper Claiborne gr., (Harbison)

*Localities*.—ALA.: Ala. (type) expl. pl. 19, fig. 10. Cf. S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (Harbison)

*Type*.—ANSP

#### ***Alectryonia vicksburgensis* (Conrad) variations**

#### **Ostreidae**

*Ostrea vicksburgensis* Conrad, 1848b, p. 126 in part; Dall, 1898b, p. 682 in part; Harris and Palmer, 1946, p. 17, pl. 1, fig. 16; pl. 2, figs. 1-6 not fig. 6a; Brann and Kent, 1960, p. 644

*Range*.—Upper Eocene. Lower Jackson gr.

*Localities*.—MISS.: Clarke Co., Shubuta. LA.: Caldwell Par., Bunker Hill, Ouachita R.; Gibson Ldg., Ouachita R. (Harris); Winn Par., Tancocks Prairie [= Prairie Home]; Tullos. ALA.: Washington Co., St. Stephens, Tombigbee R.; Choctaw Co., Old Cocoa P.O.; 1 mi. S. Melvin

*Types*.—Figured specimens, Nos. 4131-4133 PRI

#### ***Alveinus minutus* Conrad**

#### **Kelliellidae**

*Alveinus minutus* Conrad, 1865b, p. 138, pl. 10, fig. 2 as *minuta*; Conrad, 1872a, p. 53, pl. 1, fig. 6; Meyer, 1885a, p. 467; Meyer, 1886b, p. 84, pl. 1, fig. 19; Dall, 1899, p. 883; Dall, 1900, p. 1166; Harris, 1919, p. 110, pl. 37, fig. 15 copy Meyer; Harris, 1920, p. 8, pl. 17, figs. 11-15, text fig. 5; Harris and Palmer, 1946, p. 83, pl. 19, figs. 5, 5a copies Harris, 1920; Brann and Kent, 1960, p. 989; Olsson, 1964, p. 44

*Alveinus parvus* Conrad, 1865a, p. 10 as *parva nomen nudum*; Conrad, 1866a, p. 24 *nomen nudum*; de Gregorio, 1890, p. 210 not *mimatur* as in synonymy, pl. 30, fig. 14a copy Meyer; fig. 14b copy Conrad; Dall, 1903a, p. 1166

*Lutetia parva* (Conrad), Cossmann, 1893, p. 13

*Range*.—Middle Eocene. Sparingly in Gosport sd. [fide Harris and Palmer, 1946, p. 83], uppermost Claiborne gr. Upper Eocene. Lower Jackson gr. (type), Moodys Branch fm.

*Localities*.—MISS.: Clarke Co., "Enterprise" = Garland Creek fide Aldrich, 1885c, p. 307 (type). LA.: Caldwell Par., Gibson Ldg., Ouachita R. ALA.: Monroe Co., Claiborne Bluff, Alabama R.; Clarke Co., Little Stave Creek; Washington Co., Gopher Hill, Tombigbee R.

*Types*.—Syntypes (3), No. 13221 ANSP Moore, 1962, p. 75

*Alveinus parva* [us] Conrad

See *Alveinus minutus* Conrad

*Amphidesma linosa* Conrad

See *Semele linosa* (Conrad)

*Amphidesma profunda* Conrad

See *Semele profunda* (Conrad)

*Amphidesma tellinula* Conrad

See *Abra* (*Abra*) *nitens* (Lea)



**Amusium (Propeamussium) alabamense (Aldrich) Amusiidae**

*Pecten (Pleuronectia) alabamensis* Aldrich, 1886, p. 40, pl. 4, fig. 8

*Pecten (Amusium) alabamensis* Aldrich, de Gregorio, 1890, p. 183, pl. 21, fig. 26 copy Aldrich

*Amussium [sic] alabamiense [sic]* (Aldrich), Cossmann, 1893, p. 18

*Pecten alabamensis* Aldrich, Harris, 1894b, p. 41; Harris, 1896, p. 48, pl. 2, fig. 3; Brann and Kent, 1960, p. 655

*Variamussium alabamensis* (Aldrich), Sacco, 1897c, p. 50

*Pecten (Propeamussium) alabamensis* Aldrich, Dall, 1898b, p. 757

*Amusium (Propeamussium) alabamensis [sic]* Aldrich, Tucker-Rowland, 1938, p. 73, pl. 6, fig. 18

*Aequipecten (Cyclopecten) alabamensis* (Aldrich), Teppner, 1922, p. 220

*Amusium (Parvamussium) alabamense* (Aldrich), Gardner, 1935, p. 144

*Propeamussium alabamensis* (Aldrich), Rutsch, 1943, p. 151

*Range*.—Paleocene. Matthews Ldg. mem., uppermost Porters Cr. fm. (type), upper Midway gr.

*Localities*.—ALA.: Wilcox Co., Matthews Ldg., Alabama R., 9 mi. W. Camden, sec. 12, T. 12 N., R. 6 E (type); Dale's Branch; Choctaw Co., Naheola. ARK.: Pulaski Co., Little Rock. TEXAS: See Gardner, 1935, p. 145

*Type*.—Holotype, No. 638806 USNM

*Amusium (Pseudamussium) calvatum* (Morton)

See *Eburneopecten calvatus* (Morton)

*Amusium (Pseudamussium) corneoides* Harris, Tucker-Rowland, 1938 in part

See *Eburneopecten scintillatus* (Conrad)

See also *Eburneopecten* sp.

See also *Eburneopecten corneoides* (Harris)

*Amusium (Pseudamussium) hamiltonensis* Tucker

See *Eburneopecten hamiltonensis* (Tucker)

**Amusium ocalanum Dall****Amusiidae**

*Pecten (Amusium) ocalanus* Dall, 1898b, p. 756, pl. 29, fig. 2; Schuchert, et al., 1905, p. 489

*Entolium (Amussium) ocalanum* (Dall), Teppner, 1922, p. 96

*Amusium (Amusium) ocalanus* Dall, Tucker-Rowland, 1938, p. 57, pl. 51, fig. 15

*Amusium ocalanum* (Dall), Harris, 1951, p. 10, pl. 5, figs. 3-5; Brann and Kent, 1960, p. 40

*Range*.—Upper Eocene. "Ocala ls." (type), Ocala gr.

*Localities*.—FLA.: Levy Co. (type); Marion Co., Dixie Lime Products Co., Reddick; Ocala Lime Rock Products, E. side of Highway 314 E. of Kendrick (Harris)

*Type*.—Holotype, No. 137887 USNM

*Amusium (Pseudamussium) scintillatus* Conrad

See *Eburneopecten scintillatus* (Conrad)

**Amusium (Propeamussium) cf. squamulum (Lamarck) Amusiidae**

*Pecten squamula* Lamarck, 1806a, p. 354; Vélin, No. 39, fig. 5; Lamarck, 1819, p. 183; Deshayes, 1830, p. 304, pl. 45, figs. 16-18; Dixon, 1850, p. 172, pl. 3, fig. 29 (*fide* Harris); Deshayes, [1856] 1864, p. 74; Dixon, 1878, p. 214, pl. 3 [4], fig. 29

*Amussium [sic] squamula* (Lamarck), Cossmann, 1887a, p. 184; Cossmann, 1896a, App. 2, p. 63; Harris, 1897b, p. 44, pl. 7, figs. 2, 2a, 3; Harris, 1919, p. 28, pl. 15, figs. 17, 18, 18a; Brann and Kent, 1960, p. 40

*Pecten (Propeamussium) squamula* Lamarck ?, Dall, 1898b, p. 757; Tucker-Rowland, 1938, p. 73, pl. 6, fig. 17 copy Harris

*Eutolium (Propeamussium) squamula* (Lamarck), Teppner, 1922, p. 100

*A. squamulum* (Lamarck) is a Paris Basin Cuisian-Lutetian species. The American species has been so identified since Harris' grouping in 1897b of the Wilcox [Sabine] specimens with the Parisian. *A. alabamense* Aldrich from the Midway is allied to the Wilcox-Claiborne species. A worthwhile problem would be to make a detailed examination and comparison of the Parisian-American shells to determine their true identity

*Range*.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr. to Middle Eocene, Cook Mt. fm., upper Claiborne gr.

*Localities*.—Cf. ALA.: Clarke Co., Woods Bluff, Tombigbee R. (Harris). Cf. LA.: Sabine Par., Negreet Bayou (Harris)

*Type*.—Type, *Pecten squamula* Lamarck "Cabinet de M. De-france". Université de Caen. Destroyed end of World War II, *fide* André Chavan (pers. com. Sept. 12, 1962). American specimens figured, Woods Bluff, Nos. 186, 187; Negreet Bayou, Nos. 455-457 PRI

*Amusium (Pseudamussium) subminutus* (Aldrich)

See *Eburneopecten subminutus* (Aldrich)

*Anadara vughani* (Casey)

See *Barbatia (Plagiarca) vughani* (Casey)

**Anapteris regalis Van Winkle****Corbulidae**

*Corbula (Anapteris) regalis* Van Winkle in Van Winkle and Harris, 1919, p. 7, pl. 1, figs. 1-3; Van Winkle, 1921, p. 10, pl. 1, figs. 2, 3; Brann and Kent, 1960, p. 269

*Anapteris regalis* Van Winkle, Vokes, 1945, p. 18, pl. 3, figs. 11, 12 syntype, 13, 14 hypotypes

*Range*.—Lower Eocene. Upper Nanjemoy fm. (type).

*Localities*.—VA.: Hanover Co., Newcastle, S. side Pamunkey R., 3/4-1 mi. E. of bridge on U.S. 360 (type); King William Co., opposite Retreat plantation on Hanover side of Pamunkey R., about 1 or 2 mi. W. of New Kent

*Types*.—Syntypes, Nos. 1391, 1392 PRI

*Anatina claibornensis* Lea

See *Periploma claibornense* (Lea)

*Anatina [Anafina sic] complicata* (Meyer), Cossmann, 1893

See *Periploma complicatum* (Meyer)

**"Anodontia ?" augustana Gardner****Lucinidae**

*Loripes subvexa* (Conrad), Harris, 1919, p. 119 in part, pl. 39, figs. 2, 4; Brann and Kent, 1960, pp. 512, 513 as *Lucina (Loripes) subvexa*  
*Anodontia ? augustana* Gardner, 1951, p. 9, figs. 1a-e; Cooke and MacNeil, 1952, pp. 22, 23

*Range*.—Middle Eocene. Tallahatta fm. (type), lower Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R., about 3 ft. below contact of Tallahatta and Lisbon fms. (type); *Henry Co.*, Fort Gaines-Abbeville road S. of bridge over McRae Cr. (paratype); *Houston Co.*, S. slope little Choctawatchee R., St. Highway 66 (paratype). For additional localities in Ala. and S.C. see Gardner, 1951, p. 10

*Types*.—Holotype, No. 560587; paratype, Nos. 560588, 560590 USNM

*Anodontia subvexa* (Conrad)

See *Eophysema subvexa* (Conrad)

*Anomalocardia rhomboidella* (Lea)

See *Barbatia (Plagiarca) rhomboidella* (Lea)

**Anomia ephippioides Gabb****Anomiidae**

*Anomia ephippioides* Gabb, 1860d, p. 388, pl. 67, fig. 59; Conrad, 1865a, p. 15; Cossmann, 1893, p. 19 [as *ephippioides*]; Dall, 1898b, p. 782; Veatch, 1906, p. 37, pl. 19, figs. 2, 2a; Deussen, 1914, p. 59, pl. 5, figs. 2, 2a copies Veatch; Harris, 1919, p. 16 in part, pl. 11, figs. 1-3; Trowbridge, 1923, p. 95 [as *ephippioides*]; Deussen, 1924, p. 67, pl. 22, figs. 6, 6a (copies Veatch) [as *ephippioides*]; Renick and Stenzel, 1931, p. 104 [as *ephippioides*]; Trowbridge, 1932, pl. 43, fig. 2 [as *ephippioides*]; Gardner, 1945, p. 73, pl. 1, figs. 16, 18; Stenzel, Krause, and Twining, 1957, p. 98, pl. 8, figs. 3, 6, 7, 9-12; pl. 9, figs. 1, 2; pl. 11, fig. 7, text figs. 14, 15; Brann and Kent, 1960, pp. 49, 50

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Localities*.—TEXAS: *Burleson Co.*, restricted to Stone City Bluff, Brazos R. (type), *fide* Stenzel, Krause, and Twining, 1957, pp. 11, 101 ("Wheelock" type Gabb). For other localities not included by Stenzel, Krause, and Twining see Harris, 1919, p. 16

*Types*.—Syntypes (9 specimens), No. 2719 ANSP

*Anomia ephippioides lisbonensis* Aldrich

See *Anomia lisbonensis* Aldrich

**Anomia hammetti Harris****Anomiidae**

*Anomia navicelloides* var. *hammettii* Harris, 1919, p. 18 *navicelloides* [sic], pl. 12, figs. 1, 2 *navicelloides*; Brann and Kent, 1960, p. 50

*Anomia hammetti* Harris, Gardner, 1945, p. 73 copy original description; Stenzel, Krause, and Twining, 1957, p. 100

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—LA.: *Bienville Par.*, Hammett's Branch, SW. ¼ sec. 30, T. 18 N., R. 6 W., about 2 mi. NE. Mt. Lebanon (type): *Sabine Par.*, Bayou Negreet

*Types*.—Syntypes, Nos. 403, 404, 410 PRI

**Anomia jugosa** Conrad**Anomiidae**

*Anomia jugosa* Conrad, 1843, p. 310; Conrad, 1846a, p. 22, pl. 1, fig. 15 [not fig. 14]; Tuomey, 1848, pp. 163, 166, 167; Conrad, 1865a, p. 14; Dall, 1898b, p. 782; Harris, 1919, p. 17; Cooke, 1936, p. 85; Stenzel, Krause, and Twining, 1957, p. 101, pl. 8, fig. 8 type

*Range*.—Upper Eocene or Oligocene. "white limestone of South Carolina" (type). Cooper marl, Oligocene (Cooke and MacNeil, 1952)

*Locality*.—S. C. (type)

*Type*.—Holotype, ANSP *vide* Stenzel, Krause, and Twining, 1957, p. 101 not seen by Moore, 1962, p. 67

**Anomia lisbonensis** Aldrich**Anomiidae**

Cf. *Anomia* n.sp. Aldrich, 1885c, p. 302

*Anomia ephippioidea* var. *lisbonensis* Aldrich, 1886, p. 51, pl. 4, fig. 6; de Gregorio, 1890, p. 180, pl. 21, fig. 16

*Anomia lisbonensis* Aldrich, Dall, 1898b, p. 781; Harris, 1919, p. 17, pl. 11, figs. 6-10; Stenzel, Krause, and Twining, 1957, p. 100; Brann and Kent, 1960, p. 50

*Anomia* cf. *A. lisbonensis* Aldrich, Gardner, 1945, p. 72, copy original description; Richards and Palmer, 1953, p. 45, pl. 9, fig. 5

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; Avon Park ls., upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R. (type); base of Claiborne Bluff, Alabama R.; Hamilton Bluff, Alabama R. TEXAS: *Lee Co.*; *Robertson Co.*, near Wheelock. LA.: *Bienville Par.*, Hammetts Branch; *Natchitoches Par.*, Chestnut; *Natchitoches*; *Webster Par.* FLA.: *Levy Co.*, NW. corner SW.  $\frac{1}{4}$  sec. 11, T. 14 S., R. 15 E. (Richards and Palmer)

*Type*.—Holotype. No. 638807 USNM

**Anomia marylandica** Clark and Martin**Anomiidae**

*Anomia marylandica* Clark and Martin, 1901, p. 187, pl. 44, figs. 2, 2a, 3; Stenzel, Krause, and Twining, 1957, p. 100

*Range*.—Paleocene, Aquia fm. Lower Eocene. Nanjemoy fm. (type)

*Localities*.—MD.: *Charles Co.*, Popes Creek (type); Clifton Beach.

VA.: *King George Co.*, Woodstock

*Type*.—Holotype, USNM

**Anomia mcgeei** Clark [questionable]**Anomiidae**

(?) *Anomia Ruffini* Conrad, 1844, p. 323; ? Conrad, 1845a, p. 74, pl. 42, fig. 6 (Dall reprint, 1893, p. 100, pl. 42, fig. 6); ? Conrad, 1865a, p. 14; ? Conrad, 1866a, p. 3. Same as *A. mcgeei* Clark, 1895 *vide* Dall, 1898b

*Anomia Mcgeei* Clark, 1895, p. 5; Clark, 1896, p. 86, pl. 34, figs. 5a, 5b; Dall, 1898b, p. 782 = *Anomia ruffini* Conrad; Clark and Martin, 1901, p. 187, pl. 44, figs. 1, 1a copy type; Stenzel, Krause, and Twining, 1957, p. 100

*Range*.—Eocene or Miocene

*Locality*.—VA.: "*Hanover Co.*" (type)

*Type*.—Unknown. Not JHU or ANSP



**Anomia navicelloides Aldrich****Anomiidae**

*Anomia navicelloides* Aldrich, 1898, p. 97; Dall, 1898b, p. 782; Aldrich, 1903, p. 99, pl. 4, figs. 13, 14; Stenzel, Krause, and Twining, 1957, p. 100

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., near Choctaw Corner (type)

*Type*.—Holotype, No. 639005 USNM

*Anomia navicelloides hammettii* Harris

See *Anomia hammetti* Harris

**Anomia rufa Barry****Anomiidae**

*Anomia rufa* Barry, 1942+, p. 55, pl. 3, fig. 9; pl. 6, figs. 1, 2; Stenzel, Krause, and Twining, 1957, p. 100

*Range*.—Paleocene. "Logansport fm." [name preoccupied], middle Midway gr.; Hall Summit fm. (type), upper Midway gr.

*Localities*.—LA.: Sabine Par., rd. cut in the center of sec. 12, T. 8 N., R. 14 W., about 6 mi. SW. of Zwolle (type); along rd. on sec. line between secs. 7 and 18, T. 9 N., R. 11 W.; De Soto Par., rd. cut along La. Highway 745 in SW.  $\frac{1}{4}$  NE.  $\frac{1}{4}$  sec. 9, T. 10 N., R. 13 W.; auger hole on hillside on S. side of Hunter-Converse Highway, 0.1 mi. N. of De Soto-Sabine Par. line

*Types*.—Syntypes, Nos. 5008, 5008-A, 5010 LSU Pal. Mus.

**Anomia ruffini Conrad [questionable]****Anomiidae**

*Anomia ruffini* Conrad, 1844, p. 323; ? Conrad, 1845a, p. 74, pl. 42, fig. 6 (Dall reprint, 1893, p. 100, pl. 42, fig. 6); Conrad, 1865a, p. 14; Conrad, 1866a, p. 3; Clark, 1896, p. 93, doubtful Eocene; Dall, 1898b, p. 782 *A. mcgeei* Clark equals *A. ruffini* Conrad

*Range*.—?[Described with Miocene species, Conrad, 1844, 1845a]

*Localities*.—VA.: "Kent Co.", "Pamunkey R." (type) [Dall adds Waterloo, New Kent Co., Pamunkey R.]

*Type*.—ANSP *fide* H. Richards, Dec. 1962

*Anomia ruffini* (?) Conrad

See *Anomia mcgeei* Clark

*Anomia sellardsi* Stenzel in Renick and Stenzel *nomen nudum*

*Anomia sellardsi* Stenzel in Renick and Stenzel, 1931, p. 90, pl. 6, figs. 3, 4; Stenzel, Krause, and Twining, 1957, p. 100 = *nomen nudum* (Weches fm.)

**Anomia, n. sp.****Anomiidae**

*Anomia*, n. sp., Aldrich, 1885c, p. 302; Aldrich, 1886, p. 9; de Gregorio, 1890, p. 180. This species was never described. The reference is only included for completeness in the search of literature. See *Anomia lisbonensis* Aldrich

**Anomia sp.****Anomiidae**

*Anomia* sp. Harris, 1897b, p. 42, pl. 6, fig. 10; Brann and Kent, 1960, p. 51



*Range*.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R.

*Type*.—Figured specimen, No. 220 PRI

#### **Anomia sp.**

#### **Anomiidae**

*Anomia* sp., Kellum, 1926, p. 21, pl. 2, fig. 10

*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.

*Locality*.—N.C.: Pitt Co. (or Craven Co.), 3 mi. E. of Quinerly.

For additional localities see Kellum

*Type*.—Figured specimen, No. 353251 USNM

*Arca Aldrichi* (Dall)

See cf. *Cucullaria aldrichi* (Dall )

*Arca cancellata* Tuomey, 1853

See *Arca* sp. c, Kellum

*Arca cuculoides* Conrad

See *Barbatia cuculoides* (Conrad)

*Arca (Barbatia) cuculoides* Conrad "var.", Renick and Stenzel

See *Barbatia (Barbatia) uxorispalmeri* Stenzel and Krause

*Arca cuculoides ludoviciana* Harris

See *Barbatia (Cucullaearca) ludoviciana* (Harris)

*Arca harrisi* Sheldon

See cf. *Striarca harrisi* (Sheldon)

#### **Arca (Arca) hatchetigbeensis** Harris

#### **Arcidae**

*Arca subprotracta* Heilprin, Aldrich, 1886, p. 50. Not Heilprin 1882b, p. 449

*Arca hatchetigbeensis* Harris, 1897b, p. 47, pl. 7, figs. 10, 10a; Dall, 1898b, p. 622; Sheldon, 1917, p. 6, pl. 1, figs. 1-3; Stewart, 1930, p. 85; Reinhart, 1943, p. 23; Brann and Kent, 1960, p. 64

*Arca (Arca) hatchetigbeensis* Harris, Stenzel, Krause, and Twining, 1957, p. 56

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R., (type)

*Type*.—Holotype, No. 193 PRI

*Arca inornata* Meyer

See cf. *Striarca harrisi* (Sheldon)

*Arca (Barbatia) lignitifera* Aldrich

See *Barbatia lignitifera* Aldrich

*Arca lima* Conrad "var." Aldrich

See *Barbatia cuculoides* (Conrad) subsp.

*Arca (cuculoides?) ludoviciana* Harris

See *Barbatia (Cucullaearca) ludoviciana* (Harris)

See also *Barbatia (Cucullaearca)* sp.

***Arca ludoviciana* Harris, Deussen, 1924**See *Barbatia* (*Barbatia*) *uxorispalmeri* Stenzel and Krause***Arca* (*Cucullaearca*) *macrodonta* (Whitfield)**See *Cucullaea macrodonta* Whitfield***Arca onochela* (Rogers and Rogers)**See *Cucullaea gigantea* Conrad***Arca ozarkensis* Aldrich**See *Cucullaria ozarkensis* (Aldrich)***Arca pectuncularis* (Lea)**See ? *Pachecoa* (? *Pachecoa*) *pectuncularis* (Lea)***Arca* (*Arca*) *petropolitana* Stenzel and Krause****Arcidae***Arca* (*Arca*) *petropolitana* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 56, pl. 5, figs. 1-4*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gt.*Locality*.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)*Type*.—Holotype, No. 20711 BEG***Arca quindecemradiata* Gabb****Arcidae***Arca quindecemradiata* Gabb, 1860b, p. 95, pl. 2, fig. 2; Meek, 1864, p. 9; Whitfield, 1885, p. 208, pl. 27, figs. 10-13; Johnson, 1905, p. 9; Weller, 1907, p. 410, pl. 34, figs. 2, 3

For complete Cretaceous synonymy see Weller, 1907

*Range*.—Lower Eocene. Vincentown fm. (Weller) (type horizon in doubt).*Localities*.—N. J.: "New Jersey" (type). *Ocean Co.*, near New Egypt (Whitfield); *Gloucester Co.*, near Hurffville (Weller)*Type*.—ANSP (Johnson, 1905)**"*Arca reticulata* Gmelin"**See *Barbatia* (*Acar*) *aspera* (Conrad)***Arca* (*Scapharca*) *rhomboidella* Lea**See *Barbatia* (*Plagiarca*) *rhomboidella* (Lea)See also *Barbatia deussenii* Gardner***Arca* cf. *rhomboidella* Lea "var." Harris, 1951**See *Barbatia* (*Plagiarca*) cf. *rhomboidella* (Lea) "var."***Arca rhomboidella* Lea var. *Vaughan***See *Barbatia* (*Plagiarca*) *vaughani* Casey***Arca rhomboidella* *parsaba* Harris**See *Barbatia* (*Plagiarca*) *rhomboidella* *parsaba* (Harris)***Arca rhomboidella* *subscopula* Harris**See *Barbatia* (*Plagiarca*) *rhomboidella* *subscopula* (Harris)***Arca rogersi* Heilprin**See *Cucullaea transversa* Rogers and Rogers***Arca* (*C.*) *Rogersiana* Nyst, 1848**See *Cucullaea transversa* Rogers and Rogers

*Arca saffordi* GabbSee *Cucullaea saffordi* (Gabb)*Arca subprotracta* Heilprin, Aldrich, 1886. Not Heilprin, 1882b (= Oligocene)See *Arca* (*Arca*) *hatchetigbeensis* Harris*Arca subprotracta* Heilprin, 1882b, p. 449 for *Byssarca protracta* Conrad, 1848b, p. 126 VicksburgNot *Arca protracta* Rogers and Rogers, 1837, p. 332 (reprint, 1884, p. 662)*Arca* (*Cucullaearca*) *transversa* (Rogers and Rogers)See *Cucullaea transversa* Rogers and Rogers*Arca* (*Scapharca*) *vaughani* CaseySee *Barbatia* (*Plagiarca*) *vaughani* (Casey)*Arca* sp. Harbison, 1944See *Barbatia* (*Cucullaearca*) sp.**Arca** sp.**Arcidae***Arca* sp. Harris, 1896, p. 50, pl. 3, figs. 8, 9, 9a; Brann and Kent, 1960, p. 77*Range*.—Paleocene. Midway gr.*Localities*.—GA.: *Clay Co.*, Chattahoochee R., not far above mouth of Sandy Cr. (base of Midway), Fort Gaines. ALA.:*Wilcox Co.*, 1 mi. N. of Midway*Types*.—Figured specimens, Nos. 59-61 PRI**Arca** sp.**Arcidae***Arca* sp. indet. Gardner, 1935, p. 132*Range*.—Paleocene. Wills Point fm., upper Midway gr.*Locality*.—TEXAS; *Freestone Co.*, Butler Dome,  $\frac{1}{4}$  mi. NW. of Gin Lake*Type*.—Specimen probably USNM**Arca** (s.l.) spp.**Arcidae***Arca* s.l. spp. Gardner, 1935, p. 132*Range*.—Paleocene. Littig mem., Kincaid fm., lower Midway gr.*Localities*.—TEXAS: *Travis Co.*, Wilbarger Cr. near Littig (USGS Sta. 11676); *Bastrop Co.*, Half Mile Cr., Austin Quad. (USGS Sta. 11678); *Caldwell Co.*,  $1\frac{1}{2}$ -2 mi. S. Mendoza (USGS Sta. 11681); 4 mi. S. Lockhart, Martindale farm (USGS Sta. 11689)*Types*.—Specimens probably USNM**Arca** sp. a**Arcidae***Arca* sp. a, Kellum, 1926, p. 16, pl. 1, figs. 13, 14*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.*Localities*.—N.C.: *New Hanover Co.*, Wilmington; *Pender Co.*, old Rocky Point*Types*.—Figured specimens, Nos. 353300, 353301 USNM

**Arca** sp. b**Arcidae**

*Arca* sp. b, Kellum, 1926, p. 16, pl. 1, fig. 15

*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.

*Locality*.—N.C.: *New Hanover Co.*, Wilmington

*Type*.—Figured specimen, No. 353304 USNM

**Arca** sp. c**Arcidae**

Cf. *Arca cancellata* Tuomey, 1853, p. 194. Not *Arca cancellata* Gmelin, 1791, p. 3308; not Martin in J. de C. Sowerby, 1824, p. 115, pl. 473; not Phillips, 1829, pp. 171, 190 *Cucullaea cancellata*

*Arca cancellata* Tuomey, Dall, 1898b, p. 658; Miller and Stephenson, 1912, p. 55

*Arca* sp. c Kellum, 1926, p. 16

*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr. Tuomey specimens involve a Cretaceous mixture with Eocene near Wilmington, N.C. Cretaceous is in contact with Tertiary (Stanton, 1891, pp. 333, 334; Stephenson, 1923, p. 192; Kellum, 1926, p. 3)

*Locality*.—N.C.: *New Hanover Co.*, Wilmington

*Types*.—Figured specimens Nos. 353315, 353298 USNM (Kellum), *A. cancellata* Tuomey unknown.

*Arcopagia alta* (Conrad)

See *Tellina alta* (Conrad)

**Arcoperna filosa** ConradPl. 2, fig. 3 **Mytilidae**

*Arcoperna filosa* Conrad, 1865a, p. 10; Conrad, 1865b, p. 140, pl. 10, fig. 14

*Modiolus filus* (Conrad), Dall, 1898b, p. 792

*VolSELLA* (*Arcoperna*) *filosa* (Conrad), Harris and Palmer, 1946, p. 43, pl. 10, fig. 13 copy Conrad

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Locality*.—MISS.: *Clarke Co.*, "Enterprise" error for Garland Creek *fide* Aldrich, 1885c, p. 307 (type)

*Type*.—Holotype, No. 13230 ANSP Moore, 1962, p. 61

**Arcoperna ? sp.****Mytilidae**

*Arcoperna* [sic] sp. Harris, 1951, p. 26, pl. 13, fig. 12

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—GA.: *Houston Co.*, Georgia Lime Rock Quarry, 3.9 mi. from Perry

*Type*.—Figured specimen, No. 24529 PRI [omitted in Brann and Kent, 1960]

**Arcoperna ? sp.****Mytilidae**

*Arcoperna* sp. Harris, 1951, p. 26, pl. 13, fig. 13

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—GA.: *Houston Co.*, Clinchfield Quarry, west side

*Type*.—Figured specimen, No. 24530 PRI [omitted in Brann and Kent, 1960]

*Artemis lenticularis* (Rogers)

See *Dosiniopsis lenticularis* (Rogers and Rogers)

*Astarte aldrichiana* (Harris)

See cf. *Miodontiscus aldrichiana* (Harris)

**Astarte (Goodallia?) americana** Dall**Astartidae**

*Astarte (Goodallia?) americana* Dall, 1903a, p. 1496, pl. 56, fig. 5; Schuchert, *et al.*, 1905, p. 68; Harris, 1919, p. 200, pl. 32, fig. 30 copy Dall

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 109280 USNM

**"Astarte callosa" Conrad** sp. dubious**Astartidae**

*Astarte callosa* Conrad, 1833b, p. 38, not pl. 20, fig. 3 (Harris reprint, 1893, p. 60); H. C. Lea, 1849, p. 96; de Gregorio, 1890, p. 200; Harris, 1895b, p. 9 [*collosa* sic in reference]; Harris, 1919, p. 200

*Range*.—Middle Eocene, Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, missing ANSP *vide* Harris, 1895b, p. 9; Moore, 1962, p. 44

**"Astarte" castanella** Whitfield**Astartidae**

*Crassina? veta* Conrad, 1869b, p. 41, pl. 1, fig. 5

Not *Astarte veta* Conrad, 1869a, p. 279, pl. 20, fig. 4 (not fig. 5 as in text see *errata* vol. 5, p. 227)

*Astarte castanella* Whitfield, 1885, p. 231, pl. 30, figs. 1, 2; Whitfield, 1899, p. 154; Dall, 1903a, p. 1488

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Localities*.—N.J.: Monmouth Co., Shark R. (type); Farmingdale; Squankum

*Type*.—Holotype, AMNH

*Astarte cellinoides* [sic] Tuomey, 1850, p. 148 error for *A. tellinoides*  
See *Lirodiscus tellinoides* (Conrad)

*Astarte conradi* Dana

See *Pteropsella lapidosus* (Conrad)

*Astarte Conradi* Buckley, 1874. Not Dana, 1863

See *Lirodiscus smithvillensis* (Harris)

*Astarte Conradi* (=young of *Crassatella alta*) Heilprin

See *Pteropsella lapidosus* (Conrad)

**Astarte conspicua** de Gregorio

*Astarte conspicua* de Gregorio, 1890, p. 200, pl. 27, figs. 21-25; Coss-mann, 1893, p. 13

*Locality doubtful*.—Not Claiborne Eocene. Holotype formerly De Gregorio Collection, University of Palermo, Sicily Lost

*Astarte (Lirodiscus) jacksonensis* Meyer

See *Lirodiscus jacksonensis* (Meyer)



**"Astarte" marylandica Clark****Astartidae**

*Astarte marylandica* Clark, 1895, p. 5; Clark, 1896, p. 80, pl. 21, fig. 2; Clark and Martin, 1901, p. 183, pl. 42, fig. 5 type; Dall, 1903a, p. 1488 [Cf. with *Lirodiscus*]

*Range*.—Paleocene. Aquia fm. (type).

*Localities*.—MD.: *Prince Georges Co.*, Upper Marlboro (type); Brooks Estate near Seat Pleasant; *Anne Arundel Co.*, Sheckel's Farm near South R.

*Type*.—Holotype, USNM

*Astarte minor* Lea

See *Crassinella minor* (Lea)

*Astarte minutissima* Lea

See *Micromeris minutissima* (Lea)

*Astarte monroensis* Meyer

See *Cuna monroensis* (Meyer)

*Astarte neuseana* Harris

See cf. *Crassinella neuseana* (Harris)

**"Astarte" newtonensis Aldrich****Astartidae**

*Astarte newtonensis* Aldrich, 1910a, p. 121, pl. 11, figs. 2, 3

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: *Newton Co.*, Beulah P.O. (type)

*Type*.—Holotype, No. 639101 USNM

*Astarte Nicklinii* Lea

See *Lirodiscus tellinoides* (Conrad)

*Astarte Nicklinii ebla* de Gregorio, 1890, p. 199

See *Lirodiscus tellinoides* (Conrad)

*Astarte parilis* Conrad, 1854. Not Conrad, 1853a

See *Lirodiscus jacksonensis* Meyer

*Astarte parva* Lea

See *Cuna parva* (Lea)

**"Astarte" pitua de Gregorio****Astartidae**

*Astarte pitua* de Gregorio, 1890, p. 200, pl. 27, figs. 26-29; Coss-mann, 1893, p. 13; Harris, 1919, p. 201 "delete from Eocene literature"

Unknown in Eocene. Specimen probably mixed. Holotype, formerly De Gregorio Collection, University of Palermo, Palermo, Sicily. Lost

**"Astarte" planimarginata Whitfield****Astartidae**

*Astarte planimarginata* Whitfield, 1885, p. 232, pl. 30, figs. 3, 4; Whitfield, 1899, p. 154; Dall, 1903a, p. 1488

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Localities*.—N. J.: *Monmouth Co.*, Shark R. (type); Squankum; Farmingdale

*Type*.—Holotype, AMNH

**"Astarte proruta" Conrad****Astartidae**

*Astarte proruta* Conrad, 1833b, p. 38 not pl. 20, fig. 4 (Harris reprint, 1893, p. 60); H. C. Lea, 1849, p. 96; de Gregorio, 1890, p. 199; Harris, 1895b, p. 37; Harris, 1919, p. 201

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Lost fide Harris, 1895b, p. 37, Moore, 1962, p. 90

*Astarte protracta* Meyer

See *Lirodiscus protractus* (Meyer)

*Astarte recurva* Lea

See *Lucina (Recurvella) dolabra* Conrad

*Astarte (Micromeris) senex* (Meyer)

See "*Venericordia*" sp.

*Astarte smithvillensis* Harris

See *Lirodiscus smithvillensis* (Harris)

*Astarte smithvillensis* Harris "var."

See *Lirodiscus smithvillensis* Harris "var." Harris, 1897a

See also *Lirodiscus smithvillensis* (Harris)

*Astarte smithvillensis mediavia* Harris

See *Lirodiscus mediavia* (Harris)

*Astarte (Micromeris) subparva* Meyer

See *Cuna parva* (Lea)

**"Astarte" subpontis Harris****Astartidae**

*Astarte subpontis* Harris, 1896, p. 62, pl. 5, figs. 5, 5a, 5b; Brann and Kent, 1960, p. 94

This is not *Astarte*. Its generic placement is undecided.

*Range*.—Paleocene, "Very top of Midway" gr. (type)

*Locality*.—GA.: Clay Co., Chattahoochee R. ("very top of Midway") (type)

*Type*.—Holotype, No. 50 PRI

*Astarte sulcata* Lea

See *Lirodiscus tellinoides* (Conrad)

*Astarte sulcata jacksonensis* Meyer

See *Lirodiscus jacksonensis* (Meyer)

*Astarte tellinoides* Conrad, Heilprin, 1891a. Not Conrad, 1833a

See *Lirodiscus smithvillensis* (Harris)

*Astarte tellinoides* Conrad

See *Lirodiscus tellinoides* (Conrad)

*Astarte (Lirodiscus) tellinoides scutellaria* Harris

See *Lirodiscus tellinoides scutellaria* Harris

**"Astarte" triangulata Meyer****Astartidae**

*Astarte triangulata* Meyer, 1886b, p. 80, pl. 3, figs. 21, 21a; Cossmann, 1893, p. 13; Dall, 1903a, p. 1488; Harris and Palmer, 1946, p. 76, pl. 18, figs. 11-14; Brann and Kent, 1960, p. 95

<sup>1</sup>*Range*.—Upper Eocene. Jackson gr. (Harris). Oligocene. Red Bluff clay (type)

*Localities*.—ALA.: Choctaw Co., 1 mi. S. of Melvin; Clark Co., 3 mi. W. of Grove Hill (Harris). MISS.: Wayne Co., Red Bluff, Hiwanee Station, Chickasawhay R. (type); Clarke Co., S. of Shubuta (Harris)

*Type*.—Holotype, No. 644598 USNM

**"Astarte" triangulatoides Harris**

**Astartidae**

*Astarte triangulatoides* Harris, 1919, p. 91, pl. 32, figs. 12, 12a; Brann and Kent, 1960, p. 95

*Range*.—Middle Eocene. Cook Mt. fm., [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type)

*Type*.—Holotype, No. 689 PRI

*Astarte unguina* Conrad

See *Diplodonta unguina* (Conrad)

**Astarte sp.**

**Astartidae**

*Astarte* sp. Gardner, 1945, p. 150

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Locality*.—TEXAS; Travis Co., USGS Sta. 5282, bluff at Webberville

*Type*.—Unfigured specimen probably USNM

*Astarte* ? Renick and Stenzel, 1931

See *Pteropsella lapidosa* (Conrad) Renwick and Stenzel, 1931, loc. 4

See also *Pteropsella praelapidosa* (Stenzel and Krause), Renwick and Stenzel, 1931, loc. 1 only

**Atrina cawcawensis (Harris)**

**Pinnidae**

*Pinna cawcawensis* Harris, 1919, p. 31, pl. 16, figs. 12, 13 and pl. 17, figs. 1, 2; Brann and Kent, 1960, p. 690

*Atrina cawcawensis* (Harris), Stenzel, Krause, and Twining, 1957, p. 78, pl. 7, fig. 9 and text fig. 11

*Range*.—Middle Eocene. Stone City beds, middle Claiborne gr.; McBean fm. (type), upper Claiborne gr.

*Localities*.—S.C.: Orangeburg Co., 5 mi. N. of Orangeburg, "Columbia Road" (type). TEXAS: Burleson Co., Stone City Bluff, Brazos R.

*Types*.—Syntypes, Nos. 474, 475, 476 PRI

**Atrina gardnerae (Barry)**

**Pinnidae**

*Pinna gardnerae* Claypool, 1933, p. 6 abstract *nomen nudum*; Barry, 1942+, p. 50, pl. 3, figs. 1-3

This species was not described or figured by Claypool. The name was a *nomen nudum* until described and figured by Barry in 1942.

*Range*.—Paleocene. "Logansport" fm. [name preoccupied], middle Midway gr.; Kerens mem. (type), Wills Point fm., upper Midway gr.

*Localities*.—TEXAS: Navarro Co., Old Humble Pumping Station, W. bank of Trinity R. about 5.5 mi. NE. of Kerens (type).

LA.: Sabine Par., rd. cut on W. side of La. Highway 180 about

2½ mi. NE. of Pleasant Hill; *Natchitoches Par.*, field N. of farmhouse on La. Highway 404 and 429 about 4½ mi. S. of Ajax; rd. cut in NW. ¼ SE. ¼ sec. 33, T. 10 N., R. 10 W. along dirt rd. leading W. from La. Highway 404 (paratype)

*Types*.—Holotype (Barry designation), Univ. Ill.; paratype ("hypotype") No. 5007, LSU Pal. Mus.

### ***Atrina gravida* (Harris)**

### **Pinnidae**

*Pinna gravida* Harris, 1919, p. 30, pl. 16, figs. 8-11; Brann and Kent, 1960, pp. 690, 691

*Atrina gravida* (Harris), Gardner, 1945, p. 61 in part; Stenzel, Krause, and Twining, 1957, p. 79

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—LA.: Winn Par., St. Maurice (type)

*Types*.—Syntypes, Nos. 470, 471, 472, 473 PRI

### ***Atrina jacksoniana* Dall**

### **Pinnidae**

——— Lesueur, 1829 ms., Walnut Hills Fossils, pl. 5, fig. 5  
*vide* Dall, 1898b, p. 662

*Atrina jacksoniana* Dall, 1898b, p. 662; Schuchert, *et al.*, 1905, p. 76; Gardner, 1945, p. 61 in part; Stenzel, Krause, and Twining, 1957, p. 79

*Pinna* (*Atrina*) *jacksoniana* Dall, Harris and Palmer, 1946, p. 39, pl. 10, figs. 5, 6; Brann and Kent, 1960, p. 691

Cf. *Atrina jacksoniana* Dall, Harris, 1951, p. 13 in part, pl. 6, fig. 5; Brann and Kent, 1960, p. 105

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr. (type); "Ocala ls.", Ocala gr., Ga. (Harris)

*Localities*.—MISS.: Hinds Co., Jackson, "Green's marl bed" [No. 136645 USNM "cotype"]; Clarke Co., Garland's Cr., near Shubuta (type). LA.: Sabine Par., Wooley's Bluff; Grant Par., Creole Bluff, Red R. (Harris). GA.: Houston Co., Clinchfield Quarry (Harris)

*Types*.—Lectotype. No. 137831 USNM herein designated; paralectotype, No. 643768 USNM (13 specimens)

There are 14 specimens in the original material of Dall in the USNM No. 137831. The "cotypes" listed by Schuchert, *et al.*, No. 136645, are so fragmentary that they were excluded from the type material. One specimen of the 137831 lot is selected as lectotype and retains that number. The remaining 13 specimens, paratypes, are recatalogued, No. 643768 USNM

### ***Atrina quadrata* (Dall)**

### **Pinnidae**

*Pinna quadrata* Dall, 1898b, p. 660, pl. 29, fig. 7; Schuchert, *et al.*, 1905, p. 508; Harris, 1951, p. 12, pl. 6, figs. 2-4; Brann and Kent, 1960, p. 691

*Range*.—Upper Eocene "Ocala ls." (type), Ocala gr.

*Localities*.—FLA.: Marion Co., Richard's quarry, Ocala (type); Ocala Lime Rock Corp., E. of Kendrick; Dixie Lime Products Co., Reddick; Levy Co., Johnson's lime sink; Alachua Co., Arredondo (Dall)

*Type*.—Holotype, No. 112508 USNM

**Atrina rostriformis (Morton)****Pinnidae**

*Pinna* sp. Morton, 1834, p. 63

*Pinna rostriformis* Morton, 1842, p. 132; Morton, 1842a, p. 214, pl. 10, fig. 5; Gabb, 1861, p. 223; Meek, 1864, p. 9; Whitfield, 1885, p. 198, pl. 16, figs. 3, 4; Whitfield, 1899, p. 163; Johnson, 1905, p. 10; Weller, 1907, p. 420, pl. 37, figs. 2, 3

*Range*.—Lower Eocene. Vincentown fm. (type).

*Localities*.—N. J.: *Burlington Co.*, Cookstown; boundary between *Gloucester* and *Camden Cos.*, Timber Creek (type)

*Type*.—ANSP (Johnson, 1905)

**Atrina sp.****Pinnidae**

*Pinna* sp. Vaughan, 1896, p. 51, fragments cf. *P. argentea* Conrad; Dall, 1898b, p. 665

*Range*.—Upper Eocene. Lower Jackson gr.

*Locality*.—LA.: *Grant Par.*, Creole Bluff [Montgomery], Red R.

*Type*.—Specimens missing, USNM

**Atrina sp.****Pinnidae**

*Pinna* sp. Aldrich, 1886, p. 49; Dall, 1898b, p. 665; Harris, 1919, p. 31

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—ALA.: *Clarke Co.*, Coffeetown, Tombigbee R.

*Type*.—Specimen not found (not USNM)

**Atrina sp.****Pinnidae**

*Pinna* sp. Aldrich, 1886, p. 58; Dall, 1898b, p. 665

*Range*.—Lower Eocene. Nanafalia fm., lower Wilcox [Sabine] gr.

*Locality*.—ALA.: *Marengo Co.*, Nanafalia, Tombigbee R.

*Type*.—Specimen not found (not USNM)

**Atrina sp.****Pinnidae**

*Pinna* sp. Aldrich, 1886, p. 54; Harris, 1897b, p. 46, pl. 7, fig. 8; Dall, 1898b, p. 665; Brann and Kent, 1960, p. 691

*Range*.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R.

*Type*.—Aldrich specimen listed not found (not USNM); Harris figured specimen, No. 191 PRI

*Avicula annosa* Conrad

See *Pteria* ? *annosa* (Conrad)

*Avicula argentea* Conrad

See "*Pteria* cf. *argentea*" (Conrad)

*Avicula cardinocrassa* de Gregorio

See *Pteria limula* (Conrad)

*Avicula claibornensis* Lea

See *Pteria limula* (Conrad)

*Avicula limula* Conrad

See *Pteria limula* (Conrad)



*Avicula limula* Conrad, Aldrich, 1886 not Conrad, 1833c  
See *Pteria* sp.

*Avicula* sp. Harris, 1896  
See *Pteria* sp.

*Avicula* sp. Harris, 1897b  
See *Pteria* sp.

**"Axinaea" bellasculpta** Conrad

"*Axinaea*" *bellasculpta* Conrad, 1860, p. 295; Conrad, 1865a, p. 12;  
Dall, 1898b, p. 607 = *Glycymeris arcata* Conrad

*Range*.—? Oligocene *vide* Dall, 1898b, p. 607

*Locality*.—"Mississippi. Dr. Spillman" Conrad, 1860

*Type*.—Specimen not known (not listed by Moore, 1962)

*Axinaea* [*Axinea* sic] *conradi* Whitfield  
See *Glycymeris conradi* (Whitfield)

*Axinaea duplistria* Conrad, 1865b  
See *Glycymeris filosa* (Conrad)

*Axinaea filosa* (Conrad)  
See *Glycymeris filosa* (Conrad)

*Axinaea idonea* (Conrad)  
See *Glycymeris idonea* (Conrad)

*Axinaea inequistria* Conrad, 1865b  
See *Glycymeris filosa* (Conrad)

*Axinaea intercostata* Gabb  
See *Glycymeris intercostata* (Gabb)

*Axinaea staminea* (Conrad)  
See *Glycymeris staminea* (Conrad)

*Axinaea trigonella* (Conrad)  
See *Glycymeris trigonella* (Conrad)

*Barbatia* (*Cucullaria*) *aldrichi* Dall  
See cf. *Cucullaria aldrichi* (Dall)

**Barbatia (Acar) aspera** (Conrad)

**Arcidae**

*Navicula aspersa* Conrad in Wailes, 1854, p. 289, listed only, pl. 14, fig. 5 (reprint 1939, p. 19, pl. 1, fig. 5); Conrad, 1856a, p. 258 (reprint 1939, p. 4) as *aspera*; Dall, 1898b, p. 615 footnote; Sheldon, 1917, p. 14

*Barbatia* (*Calliarca*) [*sic*] *aspera* (Conrad), Conrad, 1866a, p. 23

*Barbatia* (*Calloarca*) *cuculoides* (Conrad), Dall, 1898b, p. 624 in part

*Barbatia* (Acar) *reticulata* (Gmelin), Dall, 1898b, p. 629 in part;  
Dall, 1915, p. 120 Eocene only; Reinhart, 1935, p. 24. Not *Arca reticulata* Gmelin, 1791, p. 3311. Recent

*Arca reticulata* Gmelin, Sheldon, 1917, pp. 14, 20 in part. Not *A. reticulata* Gmelin, 1791, p. 3311. Recent

*Barbatia jacksonensis* Cooke, 1926b, p. 137, figs. 13a, b *vide* Bartsch (pers. com. April 30, 1941)

*Arca* (Acar) *reticulata* Gmelin, Harris, 1919, p. 55, pl. 22, figs. 18, 19; Brann and Kent, 1960, pp. 73, 74. Not *A. reticulata* Gmelin. Recent

*Barbatia* sp. cf. *domingensis* (Lamarck), Gardner, 1945, p. 54 in part  
Not *A. Domingensis* Lamarck, 1819, p. 40

*Barbatia* (Acar) *aspera* (Conrad), Harris and Palmer, 1946, p. 47, pl. 11, figs. 12, 13; Brann and Kent, 1960, p. 115

Conrad (1854) first spelled the name of the species *aspera*. Thereafter (1856a; 1866a) he changed the spelling to *aspera* (meaning *rough*) which he probably intended to indicate. In 1854, although the shell is figured, the name was listed only and not described. It is, therefore, a *nomen nudum* and date of publication is 1856a with the spelling of *aspera*. The name *Navicula aspera* is not preoccupied by *Arca aspera* Philippi, 1844, p. 43 [not 1836 as in Dall, 1898b] as indicated by Dall and followed by Sheldon.

*Range*.—Middle Eocene. Weches fm., middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr. Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type); *Clarke Co.*, Wau-tubbee; *Newton Co.*, Hickory. TEXAS: *Bastrop Co.*, Smithville, Colorado R.

*Type*.—Missing Moore, 1962, p. 40. Holotype *Barbatia jacksonensis* Cooke, No. 353949 USNM

#### ***Barbatia corvamnisi* Harris**

#### **Arcidae**

*Barbatia corvamnisi* Harris in Harris and Palmer, 1946, p. 46, pl. 11, figs. 9-11; Wilbert, 1953, pp. 98, 123; Brann and Kent, 1960, p. 115

*Range*.—Upper Eocene. White Bluff fm., lower Jackson gr. (Wilbert); upper Jackson gr. (Crow Creek, Ark.) (type)

*Localities*.—ARK.: *St. Francis Co.*, Crow Creek, 2 mi. E. of Forrest City (type); *Jefferson Co.*, White Bluff, Arkansas R. (Wilbert)

*Types*.—Holotype, No. 4198; paratypes Nos. 4199, 4200 PRI

#### ***Barbatia* (*Cucullaearca*) *cuculoides* (Conrad)**

#### **Arcidae**

*Arca cuculoides* Conrad, 1833b, p. 37, not figured (Harris reprint, 1893, p. 59); Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 391; Harris, 1895b, p. 14; Sheldon, 1917, p. 13, pl. 2, figs. 8-12; Aldrich, 1931, p. 7, pl. 6, figs. 1, 2. Thought from sand at Claiborne [?]

*Eyssoarca cuculoides* (Conrad), Conrad, 1846b, p. 219; Harris, 1919, p. 54, pl. 22, fig. 17 holotype

*Barbatia lima* Conrad, 1848a, p. 295; Conrad, 1848b, p. 125, pl. 13, fig. 23 = "*Arca conradi* Deshayes" [*nomen nudum*, Deshayes Cat. USNM not published]; not *Arca lima* Reeve, 1844a, p. 125 *vide* Dall, 1898b, p. 615

*Navicula cuculoides* (Conrad), Conrad, 1854, p. 29

*Navicula lima* (Conrad), Conrad, 1854, p. 29

*Cucullaearca lima* (Conrad), Conrad, 1865a, p. 11

*Cucullaearca cuculoides* (Conrad), Conrad, 1865a, p. 11

*Cucullarca* [sic] *cuculoides* (Conrad), Conrad, 1866a, p. 4

*Arca* (*Cucullaearca*) *cuculoides* Conrad, de Gregorio, 1890, p. 195 in part, not pl. 24, figs. 17-20 [= *rhomboidella* Lea]

*Barbatia* (*Calloarca*) *cuculoides* (Conrad), Dall, 1898b, pp. 615, 624

*Barbatia* (*Cucullaearca*) *cuculoides* (Conrad), Reinhart, 1935, p. 27; Reinhart, 1943, p. 33; Harris and Palmer, 1946, p. 45, pl. 11, figs. 1-3; Brann and Kent, 1960, p. 115

*Arca (Barbatia) cuculloid* (Conrad), Harris, 1951, p. 15, pl. 6, fig. 9; pl. 7, fig. 1; Brann and Kent, 1960, pp. 61, 62

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Localities*.—ALA.: *Monroe Co.*, Claiborne upper bluff, Alabama R. (type). MISS.: *Hinds Co.*, Jackson. LA.: *Grant Par.*, Montgomery, Red R.

*Type*.—Probable holotype, No. 30519 ANSP, Moore, 1962, p. 51

*Barbatia (Calloarca) cuculloid* (Conrad) Dall in part

See *Barbatia (Acar) aspera* (Conrad)

***Barbatia (Cucullaearca) cuculloid* (Conrad) "var."**

**Arcidae**

*Arca lima* Conrad "var." Aldrich, 1886, p. 57

*Barbatia cuculloid* Conrad var., Harris, 1897b, p. 47 in part, pl. 8, figs. 1, 1a; Harris, 1899b, p. 301, pl. 53, fig. 3; Sheldon, 1917, p. 14; Brann and Kent, 1960, p. 115

*Range*.—Lower Eocene. Greggs Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R.

*Type*.—Figured specimen (Harris 1897b), No. 141 PRI

*Barbatia cuculloid* (Conrad) var. Harris

See *Barbatia (Cucullaearca) ludoviciana* Harris

***Barbatia deusseni* Gardner**

**Arcidae**

*Arca rhomboidella* Lea, Harris, 1919, p. 51 in part. Not Lea, 1833, p. 74

*Barbatia deusseni* Gardner, 1927, p. 365, figs. 20, 21

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—TEXAS: *Burleson Co.*, 1 mi. below Collins sic [Colliers] Ferry, Brazos R. (type)

*Type*.—Holotype, No. 369244 USNM

*Barbatia* sp. cf. *domingensis* (Lamarck), Gardner, 1945

See *Barbatia (Acar) aspera* (Conrad)

***Barbatia inglisia* Richards**

**Arcidae**

*Barbatia* ? *inglisia* Richards in Richards and Palmer, 1953, p. 44, pl. 9, fig. 2 hinge not available

*Range*.—Upper Eocene. Inglis fm. (type), lower Ocala gr.

*Locality*.—FLA.: *Levy Co.*, 2.9 mi. S. of Gulf Hammock (type)

*Type*.—Holotype, No. I-7550 Fla. Geol. Sur.

*Barbatia jacksonensis* Cooke

See *Barbatia (Acar) aspera* (Conrad)

***Barbatia lignitifera* Aldrich**

**Arcidae**

*Arca (Barbatia) lignitifera* Aldrich, 1908b, p. 75, pl. 5, figs. 6, 7

*Arca lignitifera* Aldrich, Sheldon, 1917, p. 23, pl. 5, figs. 3, 4

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Wilcox Co.*, 6 mi. E. of Thomasville (type)

*Type*.—Holotype, No. 639054 USNM

**Barbatia (Cucullaearca) ludoviciana (Harris)****Arcidae**

*Barbatia cuculloidis* (Conrad) var. Harris, 1899b, p. 301 in part, not pl. 53, fig. 3

*Arca (cuculloidis?) ludoviciana* Harris, 1919, p. 54, pl. 22, figs. 8-16 as *Byssosarca*, p. 223; Brann and Kent, 1960, pp. 146, 147 as *Byssosarca*

*Arca (Barbatia) cuculloidis ludoviciana* Harris, Barry, 1942+, p. 49, pl. 2, fig. 14

*Barbatia ludoviciana* (Harris), Gardner, 1945, p. 53 as cf.; Harris and Palmer, 1946, p. 46, pl. 11, figs. 6-8; Brann and Kent, 1960, p. 116

*Barbatia (Cucullaearca) ludoviciana* (Harris), Stenzel, Krause, and Twining, 1957 p. 58

*Range*.—Lower Eocene. Pendleton Ferry fm. (type), middle Wilcox [Sabine] gr. Middle Eocene. Cook Mt. fm., upper Claiborne gr. Upper Eocene. Lower Jackson gr. *vide* Harris, 1946

*Localities*.—TEXAS: *Sabine Co.*, right bank Sabine R., Pendleton (type). For remainder of localities in Harris, 1919, p. 54 see *Barbatia (cucullaearca)* spp. LA.: *Bossier Par.*, Roberta. See Barry, 1942+, p. 50 for further La. localities

*Types*.—Lectotype, No. 561 PRI (Harris and Palmer, 1946, p. 46); paratypes, Nos. 560, 562-568 PRI

**Barbatia palmerae Richards****Arcidae**

*Barbatia palmerae* Richards in Richards and Palmer, 1953, p. 44, pl. 9, fig. 1 hinge not available

*Range*.—Upper Eocene. Inglis fm. (type), lower Ocala gr.

*Locality*.—FLA.: *Levy Co.*, 2.9 mi. S. of Gulf Hammock (type)

*Type*.—Holotype, No. I-7551 Fla. Geol. Sur.

*Barbatia (Acar) reticulata* (Gmelin)

See *Barbatia (Acar) aspera* (Conrad)

**Barbatia (Plagiarca) rhomboidella (Lea)****Arcidae**

*Arca rhomboidella* Lea, 1833, p. 74, pl. 2, fig. 52; Conrad, App. in Morton, 1834, p. 6; Bronn, 1848a, p. 98; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 391; Aldrich, 1886, p. 9; de Gregorio, 1890, p. 196, pl. 24, fig. 28, copy Lea, not Meyer; Cossmann, 1893, p. 17 in part; Harris, 1895b, p. 39; Harris, 1919, p. 51 in part, pl. 21, figs. 11-14; pl. 22, fig. 1; Brann and Kent, 1960, p. 74

*Anomalocardia rhomboidella* (Lea), Conrad, 1865a, p. 11; Conrad, 1866a, p. 4

*Arca (Cucullaearca) cuculloidis* Conrad, de Gregorio, 1890, p. 195 in part, pl. 24, figs 17-20

*Arca (Scapharca) rhomboidella* Lea, Dall, 1898b, p. 625; Sheldon, 1917, p. 30, pl. 7, figs. 6-10; Brann and Kent, 1960, pp. 74, 75

*Barbatia (Plagiarca) rhomboidella* (Lea), Reinhart, 1935, p. 30

*Barbatia (Scapharca ?) rhomboidella* (Lea), Harris and Palmer, 1946, p. 44, pl. 11, fig. 14; Brann and Kent, 1960, p. 116

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; McBean fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, sand (type) and base, Alabama R.; Lisbon Bluff, Alabama R. MISS.: Newton Co., Newton; Clarke Co., Wautubbee. TEXAS: Lee Co. S.C.: Orangeburg Co., Orangeburg. LA.: Winn Par., St. Maurice; Bienville Par., Hammetts Branch; Sabine Par., 3 mi. NE. of Negreet. VA.: "Eocene of Virginia" Haldeman *vide* Dall, 1898b, p. 625 a museum label, never confirmed  
*Type*.—Holotype, No. 5306 ANSP

**Barbatia (Plagiarca) cf. rhomboidella** (Lea) "var." **Arcidae**  
*Arca cf. rhomboidella* Lea var. Harris, 1951, p. 14, pl. 6, fig. 8; Brann and Kent, 1960, p. 75

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.  
*Locality*.—FLA.: Marion Co., Old Camp Quarry, Florida Lime Products Co., about 2.2 mi. from Ocala  
*Type*.—Figured specimen, No. 24467 PRI

**Barbatia (Plagiarca) rhomboidella parsaba** (Harris) **Arcidae**  
*Arca rhomboidella parsaba* Harris, 1919, p. 53, pl. 22, figs. 2-4; Brann and Kent, 1960, p. 75

*Range*.—Middle Eocene. Claiborne gr. (type)  
*Locality*.—TEXAS: Sabine Co., Sabine R. (see Veatch Survey, 1902, p. 129) (type)  
*Types*.—Syntypes, Nos. 554-556 PRI

**Barbatia (Plagiarca) rhomboidella subscopula** (Harris) **Arcidae**  
*Arca rhomboidella subscopula* Harris, 1919, p. 52, pl. 21, figs. 15-17; Brann and Kent, 1960, p. 75

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.  
*Locality*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type)  
*Types*.—Syntypes, Nos. 551, 552 PRI

**Barbatia (Jacksonarca) seraperta** Harris **Arcidae**  
*Barbatia (Jacksonarca) seraperta* Harris in Harris and Palmer, 1946, p. 46, pl. 11, figs. 4, 5, 5a; Brann and Kent, 1960, p. 116

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.  
*Locality*.—MISS.: Hinds Co., cut on the G.M. and M.R.R. just beyond N. limit of freightyard, Jackson (type)  
*Type*.—Holotype, No. 4194 PRI

**Barbatia (Barbatia) uxorispalmeri** Stenzel and Krause **Arcidae**  
*Cibota mississippiensis* (Conrad), Gabb, 1860d, p. 387, pl. 67, fig. 58.  
 Not *Byssarca mississippiensis* Conrad, 1848b, p. 125  
*Arca ludoviciana* Harris, Deussen, 1924, p. 67. Not *A. ludoviciana* Harris, 1919, p. 54  
*Arca (Barbatia) cuculoides* Conrad "var.", Renick and Stenzel, 1931, p. 104  
*Barbatia (Barbatia) uxorispalmeri* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 58, pl. 5, figs. 5-10



*Range*.—Middle Eocene. Viesca mem., Weches fm., middle Claiborne gr.; Stone City beds (type), middle Claiborne gr.; Wheelock mem., Cook Mt. fm., upper Claiborne gr. (Stenzel, Krause, and Twining)

*Locality*.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

*Types*.—Holotype, No. 20708 BEG; paratypes, No. 20699 (figs. 7, 8), No. 20700 (figs. 9, 10) BEG

**Barbatia (Plagiarca) vughani** Casey

**Arcidae**

*Arca rhomboidella* Lea, var. Vaughan, 1896, p. 37, pl. 3, fig. 8

*Arca vughani* Casey, 1903, p. 265; Veatch, 1906, pl. 19, fig. 3, copy Vaughan; Deussen, 1914, pl. 5, fig. 3; Harris, 1919, p. 53, pl. 22, figs. 5-7; Brann and Kent, 1960, p. 81

*Arca (Scapharca) vughani* Casey, Sheldon, 1917, p. 31, pl. 7, fig. 11;

Brann and Kent, 1960, p. 81

*Anadara* sp. cf. *A. vughani* (Casey), Gardner, 1945, p. 55

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—LA.: *Winn Par.*, St. Maurice (type). TEXAS: *Sabine Co.*, Sabine R.

*Type*.—Holotype, No. 480107 USNM

**Barbatia (Cucullaearca) sp.**

**Arcidae**

*Arca* sp. Harbison, 1944, p. 3, pl. 2, fig. 2

*Range*.—Middle Eocene. Santee ls. (type), upper Claiborne gr.

*Locality*.—S.C.: *Berkeley Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (type)

*Type*.—Figured specimen, ANSP

**Barbatia (Cucullaearca) spp.**

**Arcidae**

*Arca (cuculloidis ?) ludoviciana* new var. Harris, 1919, p. 54 in part Specimens from localities in Harris, 1919, p. 54 other than "Sabine R." (= *B. ludoviciana* Harris). Middle Eocene

*Barnea alatoidea* (Aldrich)

See *Pholas alatoidea* Aldrich

**Basterotia prima** Aldrich

**Sportellidae**

*Basterotia ? prima* Aldrich, 1921, p. 20, pl. 3, figs. 1-3

*Range*.—Lower Eocene. Bells Ldg. mem., Tuscahoma fm.; Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Localities*.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type); Bells Ldg., Alabama R.

*Types*.—Syntypes, No. 59 GSATC

*Bathytormus* Stewart (Crassatellidae)

See also *Crassatella*

**Bathytormus alaeformis** (Conrad)

**Crassatellidae**

*Crassatella alaeformis* Conrad, 1830, p. 228, pl. 10, fig. 1; Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 396, pl. 3, fig. 2 (not fig. 3 as in text and expl. of pl.); H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 383; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5; Clark, 1895, p. 5; Clark, 1896, p. 81, pl. 27, figs. 1a-k; Vokes, 1961, p. 50, pl. 10, figs. 5, 6

*Crassatella capri-cranium* Rogers and Rogers, 1839b, p. 375, pl. 30, fig. 2 (2 figures) (reprint 1884, p. 672, pl. 5, fig. 2, 2 figures); H. C. Lea, 1849, p. 98; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5 as *capricranium*

(?) *Crassatella palmula* Conrad, 1846c, p. 396, pl. 4, fig. 1; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 383; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5; Clark, 1896, p. 93

*Crassatella declivis* Heilprin, 1880, p. 151, pl. facing p. 150, fig. 9; Aldrich, 1897a, p. 4, pl. 3, figs. 1, 1a

*Crassatella protexta* Conrad, de Gregorio, 1890, p. 198, pl. 25, fig. 12 copy Conrad, 1846c *C. alaeformis*

*Crassatellites alaeformis* (Conrad), Clark and Martin, 1901, p. 180, pl. 41, figs. 1-8; Dall, 1903a, p. 1469

*Crassatellites palmulus* (Conrad), Dall, 1903a, p. 1469

*Range*.—Paleocene. Aquia fm. (type).

*Localities*.—MD.: "Maryland" (type). *Charles Co.*, 1 mi. SE. of Mason Springs; Glymont; Clifton Beach; Mattawoman Creek; Liverpool Point; Wades Bay; *Prince Georges Co.*, 1 mi. NE. of Piscataway Cr.; Brooks Estate near Seat Pleasant; Fort Washington; Upper Marlboro [Conrad—*C. pamula*]; 3 mi. W. of Leeland on Western Branch; W. of Collington between Buena Vista and Collington; *Anne Arundel Co.*, Sheckel's Farm near South River; *Queen Annes Co.*, Rolphs Landing, Chester R. VA.; *Stafford Co.*, Potomac Cr.; Aquia Cr.; *King George Co.*, 2 mi. below Potomac Cr.; Paspotansa Cr.; *W. Hanover Co.*, Ratcliff Wharf; Rappahannock R. "S. CAR.": [Conrad, 1866a, p. 5]

*Types*.—Possible holotype, No. 30498 ANSP Moore, 1962, p. 35. Holotype *Crassatella declivis* Heilprin, No. 2490 USNM. Holotype *Crassatella palmula* Conrad, No. 30580 ANSP Moore, 1962, p. 82

### **Bathytormus clarkensis (Dall)**

### **Crassatellidae**

*Crassatellites clarkensis* Dall, 1900, p. 1192, pl. 36, figs. 20, 21, 24, 25; Dall, 1903a, p. 1470; Schuchert, *et al.*, 1905, p. 175; Harris, 1919, p. 100, pl. 34, figs. 5, 6; Gardner, 1945, p. 92, pl. 6, figs. 5, 13, 15, 16; Brann and Kent, 1960, p. 284

*Crassatella clarkensis* (Dall), Harris and Palmer, 1946, pp. 81, 82, pl. 18, figs. 30, 31; Brann and Kent, 1960, p. 279; Kent in Brann and Kent, 1960, p. 986, pl. 1, figs. 1, 2

*Bathytormus clarkensis* (Dall), Stewart, 1930, p. 138

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.; Laredo fm. (Gardner, p. 92), upper Claiborne gr.; (Jackson Eocene, Mississippi Embayment area, Harris in Harris and Palmer, 1946)

*Localities*.—LA.: *Lincoln Par.*, Chautauqua; *Sabine Par.*, 3 mi. SE. of Negreet; *Winn Par.*, St. Maurice; Cooper's well-depth 1000 ft.; Winnfield, near Saline Bayou. MISS.: *Clarke Co.*, 8 mi. W. of Enterprise; Wautubbee (type); *Newton Co.*, 2½ mi. E. of Newton. ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R.; Lisbon Bluff, Alabama R. S.C.: *Orangeburg Co.*, 3 mi. WNW. of Orangeburg. NE. MEXICO (Gardner, p. 92)

*Types*.—Syntypes, No. 139086 USNM

**Bathytormus clarkensis ferrocarolinus** (Harris)**Crassatellidae**

*Crassatellites clarkensis ferrocarolinus* Harris, 1919, pp. 100, 101, pl. 34, figs. 7-10; Brann and Kent, 1960, pp. 284, 285

*Crassatella clarkensis ferrocarolina* (Harris), Harris and Palmer, 1946, p. 82 (reference to)

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: Orangeburg Co., 3 mi. WNW. Orangeburg (type)

*Types*.—Syntypes, Nos. 711-714 PRI

**Bathytormus clarkensis ludovicianus** (Kent)**Crassatellidae**

*Crassatellites clarkensis ludovicianus* Harris, 1919, p. 101 *nomen nudum*; Gardner, 1945, p. 92

*Crassatella clarkensis ludoviciana* Kent, Brann and Kent, 1960, p. 279; Kent in Brann and Kent, 1960, p. 986, pl. 1, figs. 3-8

*Range*.—Middle Eocene, Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: Clarke Co., 8 mi. W. of Enterprise. LA.:

Winn Par., St. Maurice; Ouachita Par., Lapiniere Ldg., Ouachita R. (holotype)

*Types*.—Holotype, No. 2466; paratypes, Nos. 2463-2465 PRI

**Bathytormus clarkensis postclarkensis** (Harris)**Crassatellidae**

*Crassatellites flexurus postclarkensis* Harris, 1919, pp. 100, 103 *nomen nudum*

*Crassatella flexura postclarkensis* (Harris), Harris and Palmer, 1946, p. 82, pl. 19, figs. 3, 4

*Crassatella flexura* Conrad "var", Brann and Kent, 1960, p. 280 indicated as hypotypes.

This subspecies has never received a full description. It was figured in 1946 with an accompanied comparison with the species. The figured specimens are herein designated lectotype and paralectotype respectively.

*Range*.—Upper Eocene. White Bluff fm., lower Jackson gr.; Tullos mem. (type), Yazoo clay, upper Jackson gr.

*Localities*.—LA.: Caldwell Par., Bunker Hill Ldg., Ouachita R. (type), ARK.: Cleveland Co., Vince Ferry, Saline R. (Harris in Harris and Palmer, 1946, p. 82), MISS.: Clarke Co., Garland Cr. (paratype)

*Types*.—Lectotype, No. 4315; paralectotype, No. 4316 PRI

**Bathytormus flexurus** (Conrad)**Crassatellidae**

*Crassatella flexura* Conrad in Wailes, 1854, p. 289, pl. 14, fig. 7 (reprint, 1939, p. 19, pl. 1, fig. 7); Conrad, 1856a, p. 259 (reprint, 1939, p. 5); Conrad, 1865a, p. 10; Conrad, 1866a, p. 23; Hilgard in Hopkins, 1871, p. 11; Harris and Palmer, 1946, p. 81, pl. 18, figs. 22-28, 35, 37, fig. 38 var.; pl. 19, fig. 1 same as pl. 18, fig. 38, fig. 2 var.; Brann and Kent, 1960, pp. 279, 280

*Crassatellites flexurus* (Conrad), Dall, 1903a, p. 1469; Harris, 1919, p. 100

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: Hinds Co., Jackson (type); Town Cr., Jackson. LA.: Grant Par., Montgomery Ldg., Red R. TEXAS: Sabine Co., Robinsons Ferry ?, Sabine R.

*Types*.—Probable syntypes (2), No. 13187 ANSP. Specimens broken *vide* Moore, 1962, p. 61

**Bathytormus flexurus productus** (Conrad)**Crassatellidae**

*Crassatella producta* Conrad, 1863a, p. 289; Conrad, 1865a, p. 10; Conrad, 1865b, p. 139, pl. 10, fig. 6 [not Enterprise, Miss.]; Conrad, 1866a, p. 23; not Aldrich, 1886, p. 50; Harris, 1897b, p. 58

*Crassatellites productus* (Conrad), Dall, 1903a, p. 1469

*Crassatellites flexurus productus* (Conrad), Harris, 1919, p. 100

*Crassatella flexura producta* Conrad, Harris and Palmer, 1946, p. 81, pl. 18, figs. 29, 36; Brann and Kent, 1960, p. 280

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Locality*.—MISS.: *Clarke Co.*, "Enterprise" error for Garland Cr. (type) [see Aldrich, 1885c, p. 307]

*Type*.—Probable holotype, No. 13224 ANSP Moore 1962, p. 89

**Bathytormus protextus** (Conrad)**Crassatellidae**

*Crassatella protexta* Conrad, 1832b, p. 22, pl. 8, fig. 2; (Harris reprint, 1893, p. 40, pl. 8, fig. 2); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 395, pl. 2, fig. 7, not pl. 3, fig. 2 as in text; pl. 3, figs. 4 (2) immature; H. C. Lea, 1849, p. 98; Bronn, 1848a, p. 344; d'Orbigny, 1850, p. 383; Tuomey, 1858, pp. 265, 273, not p. 271; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5; de Gregorio, 1890, p. 198, pl. 24, figs. 31-37; pl. 25, figs. 2-11; figs. 13, 14 ? copy Conrad, 1832b, fig. 15, not fig. 12; Cossmann, 1893, p. 13; Harris, 1895b, p. 37; Harris and Palmer, 1946, p. 82, pl. 18, figs. 32-34; Brann and Kent, 1960, pp. 281, 282

*Crassatellites protextus* (Conrad), Dall, 1903a, p. 1469; Harris, 1919, pp. 100-103, pl. 35, figs. 1-5; Brann and Kent, 1960, p. 286

*Bathytormus protextus* (Conrad), Stewart, 1930, pp. 37, 137

*Crassatellites alaeformis* Conrad var., Aldrich, 1931, p. 6, pl. 6, fig. 5, young of *B. protexta* (Conrad)

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Types*.—Possible syntypes, (3) No. 30520; possible syntypes No. 30511 ANSP. One specimen marked with "X", presumably indicating type. Moore, 1962, p. 90. Figured specimen *Crassatellites alaeformis* Conrad var., Aldrich, 1931, GSATC

**Bathytormus protextus sinus** (Harris)**Crassatellidae**

*Crassatella protexta sinus* Harris, 1951, p. 18, pl. 8, figs. 3, 4; Brann and Kent, 1960, p. 282

*Range*.—Upper Eocene. "Ocala ls." (type), Ocala gr.

*Localities*.—GA.: *Houston Co.*, Georgia Lime Rock Co., 3.9 mi. from Perry. FLA.: *Marion Co.*, just below office and plant Dixie Lime Products Co., Zuber (type localities)

*Types*.—Syntypes, Nos. 24481, 24482 PRI

**Biocorbula pearlensis** (Meyer)**Corbulidae**

*Corbula pearlensis* Meyer, 1886b, p. 83, pl. 3, figs. 16, 16a

*Corbula ? pearlensis* Meyer, Cossmann, 1893, p. 7

*Corbula ? pearlensis* Meyer, Dall, 1898b, p. 846

*Corbula (Biocorbula) pearlensis* Meyer, Harris and Palmer, 1946, p. 117, pl. 25, figs. 1, 2; Brann and Kent, 1960, p. 268

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Town Creek, Jackson (type)

*Type*.—Holotype, No. 638853 USNM



**Cf. *Blagroveia gunteri* Richards****Veneridae**

*Blagroveia gunteri* Richards in Richards and Palmer, 1953, p. 54, pl. 12, figs. 6, 7 (?)

*Range*.—Middle Eocene. Avon Park ls., upper Claiborne gr. Upper Eocene. Inglis fm. (type.) lower Ocala gr.

*Localities*.—FLA.: *Levy Co.*, road metal pit 2.9 mi. S. of N. limits of town of Gulf Hammock just SW. of State Road 55 SW.  $\frac{1}{4}$  sec. 34, T. 14 S., R. 16 E. (type); New Lebanon dolomite pit SW.  $\frac{1}{4}$  NE.  $\frac{1}{4}$  sec. 12, T. 16 S., R. 16 E.; *Citrus Co.*, Dunnellon Phosphate Mining Co., SW.  $\frac{1}{4}$  SE.  $\frac{1}{4}$  sec. 10, T. 18 S., R. 19 E.

*Types*.—Holotype, No. I-7579; paratypes (?), No. I-7580 Fla. Geol. Sur.

*Bornia dalli* (Cossmann)

See cf. *Mysella dalli* (Cossmann)

***Bornia isosceles* Harris****Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Bornia prima* (Aldrich), Vaughan in Veatch and Stephenson, 1911, p. 240; Cooke, 1918, p. 51 not *Kellia prima* Aldrich, 1897a, p. 15

*Bornia isosceles* Harris, 1919, p. 109, pl. 37, figs. 13, 13a

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—GA.: *Richmond Co.*, Sloan's Scarp on McBean Cr., between McBean Station and Savannah R. (type)

*Types*.—Syntypes, No. 559281 USNM (Harris, 1919, pl. 37, fig. 13a)

***Bornia perdita* Harris****Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Bornia perdita* Harris, 1919, p. 109, pl. 37, figs. 14, 14a; Brann and Kent, 1960, p. 126

*Range*.—Middle Eocene. Probably Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—LA.: "Sabine River?" [Veatch Survey, 1902, p. 129] (type)

*Type*.—Holotype, No. 725 PRI

***Bornia plectopygia* Dall****Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Bornia plectopygia* Dall, 1900, p. 1149; 1903a, pl. 49, fig. 9; Schuchert, et al., 1905, p. 103; Harris, 1919, p. 108, pl. 37, fig. 11 copy Dall

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 108493 USNM

***Bornia prima* (Aldrich)****Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Kellia prima* Aldrich, 1897a, p. 15, pl. 5, figs. 3, 3a; Harris, 1899b, p. 320, pl. 53, fig. 11 copy Aldrich; Deussen, 1924, p. 49, pl. 15, figs. 7, 7a

"*Kellia*" *prima* Aldrich, Harris, 1897b, p. 58, pl. 11, figs. 6, 6a copies Aldrich; Dall, 1899, p. 883

*Bornia prima* (Aldrich), Dall, 1899, p. 883; Dall, 1900, p. 1149; Barry, 1942+, p. 66; not *B. prima* (Aldrich), Vaughan in Veatch and Stephenson, 1911, p. 240. See *B. isosceles* Harris



*Range*.—Lower Eocene, Sabinetown fm., upper Wilcox [Sabine] gr.; Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Choctaw Corner (type); Woods Bluff, Tombigbee R. (Dall). TEXAS: Sabine Co., Sabinetown  $\frac{1}{4}$  mi. down stream from Sabinetown Ferry Ldg., Sabine R.

*Type*.—Holotype, No. 638999 USNM

*Bornia prima* (Aldrich), Vaughan in Veatch and Stephenson  
See *B. isosceles* Harris

***Bornia scintillata* Dall      Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Bornia scintillata* Dall, 1900, p. 1149; 1903a, pl. 49, fig. 10; Schuchert, et al., 1905, p. 103; Harris, 1919, p. 107, pl. 37, fig. 10 copy Dall

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 108492 USNM

***Bornia zapataensis* Gardner      Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Bornia zapataensis* Gardner, 1927, p. 374, fig. 9; Trowbridge, 1932, pl. 41, fig. 1 copy Gardner type

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—TEXAS: Zapata Co., 3 mi. SE. of Zapata (type)

*Type*.—Holotype, No. 369237 USNM

***Brachidontes alabamensis* (Aldrich)      Mytilidae**

*Modiola alabamensis* Aldrich, 1895b, p. 16, pl. 5, fig. 13; Harris, 1897b, p. 47, pl. 7, fig. 9; Harris, 1899b, p. 300, pl. 53, fig. 2 Texas, specimens lost; Brann and Kent, 1960, p. 563

*Modiolus* (*Brachydontes* [sic]) *alabamensis* (Aldrich), Dall, 1898b, p. 796 Not *Modiolus alabamensis* (Aldrich), Clark and Martin, 1901, p. 185, pl. 43, figs. 4, 5, 5a=*B. potomacensis* (Clark)

*Modiolus* (*Brachydontes* [sic]) *alabamensis* (Aldrich), Barry, 1942+, p. 57, pl. 3, fig. 6; pl. 5, fig. 4; Wasem and Wilbert, 1943, p. 192

*Voltsella alabamensis* (Aldrich), Shimer and Shrock, 1944, p. 413, not pl. 164, fig. 17 copy Clark and Martin=*B. potomacensis* (Clark)

*Musculus alabamensis* (Aldrich), Gardner, 1945, p. 57. Not Harris as in Gardner

*Range*.—Lower Eocene. Pendleton Ferry fm., middle Wilcox [Sabine] gr., Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.; Choctaw Corner (type). LA.: Sabine Par., about  $\frac{1}{4}$  mi. upstream from bridge over Sabine R. on La. Highway 6, R. S. Hendricks farm in center of S.  $\frac{1}{2}$  sec. 31, T. 7 N., R. 11 W. TEXAS: Sabine Co., Pendleton, Sabine R. [fide Harris, 1899b, p. 300]

*Type*.—Holotype, No. 638959 USNM

***Brachidontes potomacensis* (Clark)      Mytilidae**

*Modiola potomacensis* Clark, 1895, p. 5; Clark, 1896, p. 85, pl. 34, figs. 1 a-c

*Modiolus (Brachydontes [sic]) potomacensis* (Clark), Dall, 1898b, p. 796

*Modiolus alabamensis* (Aldrich), Clark and Martin, 1901, p. 185, pl. 43, fig. 4; figs. 5, 5a copy Clark *M. potomacensis*. Not *M. alabamensis* (Aldrich), 1895b, p. 16

*Volsella alabamensis* (Aldrich), Shimer and Shrock, 1944, p. 413, pl. 164, fig. 17 copy Clark and Martin

*Range*.—Paleocene. Aquia fm. (Clark and Martin). Lower Eocene. Nanjemoy fm. (type)

*Localities*.—MD.: Charles Co., Popes Cr.; 2 mi. above Popes Cr.; Wades Bay; Liverpool Point; Clifton Beach; 1 mi. SE. of Mason Springs; Glymont; Prince Georges Co., Upper Marlboro; Fort Washington. VA.: Stafford Co., Potomac Cr. (type); Aquia Cr.; King George Co., Woodstock; mouth of Paspotansa; 2 mi. below Potomac Cr.

*Types*.—Syntypes, USNM

Syntypes have been reasoned to be from Potomac Cr., Va., because the explanation of the original figures (1896, pl. 34, figs. 1 a-b) did not designate the locality, but in 1901, Clark and Martin refigured the species (under *M. alabamensis* Aldrich) using the initial illustrations with Potomac Cr. as the locality. They added a figure of a specimen from Paspotansa Cr. but that was an afterthought.

#### Cf. *Brachidontes saffordi* (Gabb)

#### Mytilidae

*Modiola saffordi* Gabb, 1860d, p. 395, pl. 68, fig. 30; Safford, 1869, p. 419; Harris, 1896, p. 49, pl. 3, figs. 4, 5; Brann and Kent, 1960, p. 563

*Modiolus (Brachydontes [sic]) saffordi* (Gabb), Dall, 1898b, p. 796; Gardner, 1935, p. 146, pl. 8, figs. 8, 9

*Volsella saffordi* (Gabb), Shimer and Shrock, 1944, p. 413, pl. 164, fig. 18 copy Harris

Hinge not known

*Range*.—Paleocene. "Ripley Group" (type) = [Not Cretaceous] Kincaid fm., lower Midway gr.

*Localities*.—TENN.: Hardeman Co. (type), Hannah's, 1¼ mi. N. of Crainsville (Harris). TEXAS: See Gardner, 1935.

*Type*.—Lost ? [*fide* Harris, 1896, p. 50] ["lost" *fide* Gardner, 1935, p. 146]

#### *Brachidontes stubbsi* (Harris)

#### Mytilidae

*Modiola stubbsi* Harris, 1899b, p. 298, pl. 52, figs. 5-6 specimen lost

*Modiolus (Brachydontes [sic]) stubbsi* (Harris), Barry, 1942+, p. 56, pl. 6, fig. 3; Wasem and Wilbert, 1943, p. 192

*Range*.—Lower Eocene. Marthaville fm. (type), lower Wilcox [Sabine] gr.

*Localities*.—LA.: Sabine Par., Raines place about 6 mi. WSW. of Marthaville (type); road cut along La. Highway 42-D in SW. ¼ SE. ¼ SW. ¼ sec. 25, T. 8 N., R. 12 W. *Natchitoches Par.*, field adjacent to La. Highway 607 in NW. ¼ SW. ¼ NE. ¼ sec. 29, T. 9 N., R. 10W.

*Type*.—Holotype lost. (Harris coll.)

**Brachidontes texanus (Harris)****Mytilidae**

*Modiola texana* Harris, 1894b, p. 180 listed *nomen nudum*  
*Modiola texana* "Gabb", Harris, 1895a, p. 46 in part, pl. 1, fig. 2;  
 Schuchert, et al., 1905, p. 407; Stenzel, Krause, and Twining, 1957,  
 p. 39 in part. Not *Perna texana* Gabb, 1862c, p. 371  
*Modiolus (Brachidontes) texanus* "Gabb", Dall, 1898b, p. 796 in part  
*Modiolus texanus* (Gabb), Harris, 1919, p. 32 in part, not of Gabb, pl.  
 17, figs. 6, 7 types, not fig. 8 = *M. sp.*, not Trowbridge, 1932, pl.  
 43, fig. 3

This is not the "*Perna texana* of Gabb". Because the original generic name was not given as *Modiola* the specific name may stand with Harris as author.

Harris in 1894b, (Arkansas Geol. Sur.) reviewed in the last part of the Bulletin, the Claiborne and Jackson Eocene stages of Louisiana. On pages 178-180 he gave sections in Bossier Parish. In a reddish sandstone (Pope Joy Cut) and at locality "23 N., 12 W. section 19, south-east quarter, (Station 2416 of Museum [USNM] register)", he identified *Modiola texana*. He believed the species to be what Gabb named "*Perna texana*" from Caddo Peak, Texas (see Stenzel, Krause, and Twining, 1957, p. 39). Harris in 1895a included the forms under *Modiola texana* (Gabb) but figured the specimen in the USNM from "Red Land, La.", Bossier Parish, capitalizing the names as of a place. In 1899, Harris and Veatch described the "Red land area" of Bossier Parish of Louisiana referring to the previous description in the Arkansas bulletin (1894b, p. 180). There is no doubt that the name of "Red Land" of Harris, 1895a and 1919 is the red land area. By typographical slips "23 N" became "sp. 23, N" in 1919.

This species has never had a description. Its indication has been to a wrongly identified form. It has been illustrated, has a "type" locality, and the "type" is in existence. It is worthy of description. The name is not preoccupied by that of Gabb because the original of Gabb was "*Perna texana*". If both species belong in the same genus Gabb's name has priority.

*Range*.—Middle Eocene. Claiborne gr. ("type")

*Localities*.—LA.: Bossier Par., "near Red Land" ("type") USNM "Sect. 19, R. 12 W.; sp. 23 N." [sic] (Harris, 1919). Harris, 1894b, p. 86, "23 N., 12 W., sec. 19, SE. 1/4". "Redland area. . . ." Harris and Veatch, 1899, pp. 47, 86. Cf. LA.: Caddo Par., Vivian; Webster Par., 7 mi. N. of Plain Dealing. Cf. TEXAS: Atacosa Co., Frio Co., 2 mi. E. of Arnold's Ranch

*Type*.—"Holotype", No. 154872 USNM ("Pleistotype" becomes "holotype")

**Brachidontes sp.****Mytilidae**

*Modiolus texanus* (Gabb), Trowbridge, 1932, pl. 43, fig. 3. Not "*Perna texanus*" Gabb, 1862c; not Harris, 1895a and 1919

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—TEXAS; Zapata Co., 4.8 mi. SE. of Zapata

*Type*.—Figured specimen, No. 371785 USNM

*Breviarca stearnsii* Gardner

See *Striarca stearnsii* (Gardner)

*Bucardia veta* Conrad

See ? *Glossus veta* (Conrad)

*Byssosarca cuculoides* ConradSee *Barbatia cuculoides* (Conrad)*Byssosarca (cuculoides ?) var. ludoviciana* HarrisSee *Barbatia (Cucullaearca) ludoviciana* (Harris)*Byssosarca lima* ConradSee *Barbatia cuculoides* (Conrad)*Byssomia petricoloides* LeaSee ? *Lithophaga petricoloides* (Lea)**Caestocorbula fossata** (Meyer and Aldrich)**Corbulidae***Corbula Murchisoni* var. *fossata* Meyer and Aldrich, 1886, p. 45, pl. 2, fig. 22*Corbula (Aloidis) fossata* [Meyer and] Aldrich, Dall, 1898b, p. 844*Corbula murchisoni* var. *fossata* Meyer and Aldrich, Harris, 1919, p. 193, pl. 58, figs. 11, 16-20; Brann and Kent, 1960, pp. 266, 267 [not var.]"Corbula" *fossata* Aldrich, Vokes, 1944, p. 621 probably *Caestocorbula**Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr., occasionally Gosport sd., uppermost Claiborne gr.*Localities*.—LA.: *Bienville Par.*, Mt. Lebanon. MISS.: *Newton Co.*, Newton (type); Hickory; *Clarke Co.*, Wautubbee; 8 mi. W. of Enterprise. [?] *Co.* Johnson's place, location unknown. ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (Harris); Lisbon Bluff, Alabama R.*Type*.—Holotype, No. 638748 USNM**Cf. Caestocorbula murchisonii** (Lea)**Corbulidae***Corbula oniscus* Conrad, 1833a, p. 341; Conrad, 1835a, (Harris reprint, 1893, p. 115, pl. 19, fig. 3); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846b, p. 219; Conrad, 1846c, p. 398 in part, not pl. 4, fig. 3 = *C. gibbosa*; H. C. Lea, 1849, p. 98 in part; d'Orbigny 1850, p. 382 in part, not Conrad, "p. 542"; Tuomey, 1858, pp. 265, 273 in part; Conrad, 1865a, p. 3 in part; Conrad, 1866a, p. 8 in part, Heilprin, 1884b, p. 89; Harris, 1895b, p. 31 in part; Dall, 1898b, p. 843 in part; Clark and Martin, 1901, p. 164 in part, not pl. 32, figs. 7, 7a, 8, 8a, 8b; not Shimer and Shrock, 1944, p. 431, pl. 172, figs. 10, 11 copies Clark and Martin*Corbula Murchisonii* Lea, 1833, p. 46, pl. 1, fig. 13; Conrad in Morton, 1834, p. 8 = "*C. nasuta*" Conrad; H. C. Lea, 1849, p. 98 (as *Murchisoniana*); de Gregorio, 1890, p. 231, pl. 37, fig. 22 copy Lea; figs. 23, 24 copies *C. oniscus* Conrad; figs. 25-39; pl. 38, figs. 1-13; Cossmann, 1893, p. 6; Harris 1895b, p. 29; Harris, 1919, p. 191, pl. 58, figs. 7-10, 12-15; Harris and Palmer, 1946, p. 114, pl. 24, figs. 2, 6; Brann and Kent, 1960, p. 266.Not *Corbula oniscus* Conr., var. *C. gibbosa* Lea, Heilprin, 1881, p. 364

The name *Corbula oniscus* Conrad, 1833, Jan. has priority over *C. murchisonii* Lea, 1833, December. Conrad mixed the identification of his *C. oniscus* so badly between *C. gibbosa* Lea and *C. murchisonii* that we agree with Harris, 1919 the less confusing settlement is to use Lea's name, *C. murchisonii*.



*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes, Nos. 5061, 5062 ANSP. *C. oniscus* Conrad probably syntypes (12), No. 20347 ANSP Moore, 1962, p. 81

### **Caestocorbula wailesiana** (Harris in Dall)

### **Corbulidae**

*Corbula bicarinata* Conrad in Wailes, 1854, p. 289, pl. 14, fig. 3 (reprint, 1939, p. 19, pl. 1, fig. 3); Conrad, 1856a, p. 253 (reprint, 1939, p. 4); Conrad, 1865a, p. 3; Conrad, 1866a, p. 24; Meyer, 1885a, p. 462. Not *C. bicarinata* G. B. Sowerby I, 1833b, p. 35

*Corbula (Aloidis) wailesiana* Harris ms in Dall, 1898b, p. 846, new name for *C. bicarinata* Conrad; Harris and Palmer, 1946, p. 113, pl. 23, figs. 27, 28; pl. 24, figs. 1, 3, 4, 5, 7, 8; Brann and Kent, 1960, pp. 274, 275

*Corbula wailesiana* Harris (ms) Dall, Harris, 1919, pp. 189, 192, pl. 57, figs. 22, 23; Brann and Kent, 1960, p. 274

"*Corbula*" *wailesiana* Harris, Vokes, 1944, p. 621 probably *Caestocorbula*

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: Hinds Co., Jackson (type). ARK.: Cleveland Co., Vince Bluff, Saline R. (small specimens, Harris). LA.: Grant Par., Montgomery, Red R. See Harris and Palmer for further discussion of localities

*Types*.—*Corbula bicarinata* Conrad, syntypes (5), No. 13188 ANSP Moore, 1962, p. 42

### **Callista (Costacallista) aequorea** (Conrad)

### **Veneridae**

*Cytherea aequorea* Conrad, 1833b, p. 36, not pl. 19, fig. 3 as in text (Harris reprint, 1893, p. 58, pl. 20, fig. 5); Conrad, App. in Morton, 1834, p. 7; Conrad, 1842b, p. 175; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 380; Tuomey, 1858, p. 265; Smith, 1885, p. 274; Aldrich, 1885c, p. 306; Langdon, 1886, p. 208; de Gregorio, 1890, p. 216 in part; Harris, 1895b, p. 2

*Cytherea Hydi* Lea, 1833, p. 66, pl. 2, fig. 42; Conrad, App. in Morton, 1834, p. 7=*C. aequorea* Conrad; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 380=*C. aequorea*; Harris, 1895b, p. 22=*C. aequorea* Conrad

*Meretrix aequorea* (Conrad), Conrad, 1854, p. 29; Conrad, 1856a, p. 257 (reprint, 1939, p. 3); Cossmann, 1893, p. 9; Harris, 1919, p. 140, pl. 44; figs. 3-6; Brann and Kent, 1960, p. 543

*Dione aequorea* (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

*Cytherea aequorea* Mut. *cominduta* de Gregorio, 1890, pp. 216, 217, pl. 34, figs. 5-10

*Cytherea aequorea* Mut. *Hydi* Lea, de Gregorio, 1890, p. 216, pl. 33, fig. 7, copy Lea, figs. 8-15 [not fig. 18-15 as in Palmer]; Cossmann, 1893, p. 10

*Callista (Costacallista) aequorea* (Conrad), Palmer, 1927/1929, p. 89, pl. 15, figs. 3, 9, 14; Brann and Kent, 1960, p. 150

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes, No. 20157 ANSP Moore, 1962, p. 35; syntypes (2) *C. aequorea* Mut. *cominduta* de Gregorio, No. 26450 PRI De Gregorio Coll.



**Callista (Costacallista) aldrichi (Harris)****Veneridae**

*Meretrix perovata* var. *aldrichi* Harris, 1895b, p. 48, pl. 1, fig. 1;  
Harris, 1919, p. 138, pl. 43, fig. 17; pl. 44, figs. 1, 2, 2a; Brann and  
Kent, 1960, pp. 545, 546

*Callista (Costacallista) perovata aldrichi* (Harris), Palmer, 1927/1929,  
p. 87, pl. 15, figs. 7, 13; Brann and Kent, 1960, p. 153

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne  
gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)  
*Type*.—Holotype, No. 44 PRI [Not Texas State or Univ., Texas  
Mus. as in Harris, 1895; 1919]

**Callista (Callista) annexa (Conrad)****Veneridae**

*Dione annexa* Conrad, 1865b, p. 137, pl. 10, fig. 5; Conrad, 1866a, p.  
24

*Meretrix annexa* (Conrad), Harris, 1919, p. 138

*Callista (Callista) annexa* (Conrad), Palmer, 1927/1929, p. 75, pl.  
14, figs. 17, 20; Harris and Palmer, 1946, p. 95, pl. 21, figs. 6-8;  
Brann and Kent, 1960, pp. 150, 151

*Macrocallista annexa* (Conrad), Richards and Palmer, 1953, p. 53, pl.  
12, fig. 5

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.  
(type)

*Localities*.—MISS.: Clark Co., "Enterprise"—Garland Cr. see  
Aldrich, 1885c, p. 307 (type); Hinds Co., Jackson. LA.: Grant  
Par., Montgomery, Red R.; Caldwell Par., Gibson Ldg.,  
Ouachita R.; Bunker Hill, Ouachita R.; Catahoula Par., Dan-  
ville Ldg., Ouachita R. FLA.: Levy Co., New Lebanon dolo-  
mite pit, SW.  $\frac{1}{4}$  NE.  $\frac{1}{4}$  sec. 12, T. 16 S., R. 16 E.; road metal  
pit 2.9 mi. S. of N. limits of Gulf Hammock, just SW. of  
State Road 55 in SW.  $\frac{1}{4}$  sec. 34, T. 14 S., R. 16 E. (Richards  
and Palmer)

*Type*.—Missing, ANSP Moore, 1962, p. 38

*Callista annexa pearlensis* (Harris)

See *Callista (Costacallista) pearlensis* (Harris)

**Callista (Costacallista) mortoni (Conrad)****Veneridae**

*Cytherea Mortoni* Conrad, 1834, p. 150; Conrad, 1835a (Harris reprint,  
1893, p. 116, pl. 20, fig. 1); Conrad, App. in Morton, 1834, p. 7;  
H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 380; Heilprin, 1879b, p.  
222; de Gregorio, 1890, p. 220; Harris, 1895b, p. 29

*Meretrix mortoni* (Conrad), Conrad, 1854, p. 30; Harris, 1919, p. 139,  
pl. 43, figs. 15, 16 (not fig. 14 as in text = *M. perovata*); Brann  
and Kent, 1960, pp. 543, 544

*Dione Mortoni* (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

*Cytherea aequorea* var. *Mortoni* Conrad, Cossmann, 1893, p. 10

*Callista (Costacallista) mortoni* (Conrad), Palmer, 1927/1929, p. 88,  
pl. 15, figs. 11, 19, 20; Stewart, 1930, p. 241; Brann and Kent, 1960,  
p. 152

*Alloccardia mortoni* (Conrad), Perrilliat Montoya, 1963, p. 12, pl. 2,  
fig. 2

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne  
gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Thirteen specimens, one possibly figured, No. 20179 ANSP  
Moore, 1962, p. 78

**Callista (Callista) neusensis (Harris)**

**Veneridae**

*Meretrix neusensis* Harris, 1919, p. 136, pl. 43, figs. 4-7, 10; Brann and Kent, 1960, p. 544

*Callista (Callista) neusensis* (Harris), Palmer, 1927/1929, p. 73, pl. 14, figs. 13, 14, 16

*Range*.—Trent fm.—age in determination. [? Miocene, formerly included in Eocene.]

*Locality*.—N.C.; Craven Co., Rocky Ldg. on the Neuse R., 16-17 mi. above Newbern, in 'Trent fm.' near Newbern (type)

*Types*.—Syntypes, 1154-1157, 1163 PRI

**Callista (Costacallista) pearlensis (Harris)**

**Veneridae**

*Meretrix pearlensis* Harris, 1897a, p. 470, pl. 18, figs. 4, 5

*Callista (Costacallista) pearlensis* (Harris), Palmer, 1927/1929, p. 87, pl. 15, figs. 10, 12, 15; Brann and Kent, 1960, p. 153

*Callista annexa pearlensis* (Harris), Harris and Palmer, 1946, pp. 95, 96, pl. 21, fig. 9; Brann and Kent, 1960, p. 151

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: Hinds Co., Jackson (type), Town Creek. LA.: Grant Par., Montgomery, Red R.

*Types*.—Syntypes, ANSP

**Callista (Callista) perovata (Conrad)**

**Veneridae**

*Cytherea perovata* Conrad, 1833b, p. 37, not pl. 19, fig. 5 as in text, (Harris reprint, 1893, p. 59, pl. 20, fig. 4); Conrad, App. in Morton, 1834, p. 8; Conrad, 1842b, p. 179, footnote; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 380; Tuomey, 1858, p. 265 *per-ovata*; Heilprin, 1881, p. 364; Aldrich, 1885c, p. 306; Harris, 1895b, p. 34

*Cytherea comis* Lea, Dec. 1833, p. 66, pl. 2, fig. 41; Conrad, App. in Morton, 1834, p. 8 = *C. perovata* Conrad; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 380; Meyer, 1885a, p. 467; Harris, 1895b, p. 12 (= *C. perovata* Conrad)

*Meretrix perovata* (Conrad), Conrad, 1854, p. 30; Cossmann, 1893, p. 10; Harris, 1919, p. 138, pl. 43, figs. 12, 13, 13a, 14 (not 11 and 12a as in text); Brann and Kent, 1960, p. 545

*Dione perovata* (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

*Cytherea aequorea* Mut. *comis* Lea, de Gregorio, 1890, pp. 216, 217, pl. 33, fig. 23, copy Lea, figs. 24, 25; pl. 34, figs. 1-4

*Callista (Callista) perovata* (Conrad), Palmer, 1927/1929, p. 74, pl. 14, figs. 9a, 11, 15, 21, 22; Conrad, 1833b not Conrad, 1832 as in text; Brann and Kent, 1960, p. 153

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type); Lisbon Bluff, Alabama R. [cf. GA.: Burke Co., Shell Bluff, Savannah R., Harris, 1919]

*Types*.—Syntypes (6) ?, No. 30525 ANSP Moore, 1962, p. 86

**Callista (Costacallista) perovata aldrichi (Harris)**

See *Callista (Costacallista) aldrichi* (Harris)

**Callista (Callista) perovata lisbonensis** (Harris)**Veneridae**

*Meretrix perovata* var. *lisbonensis* Harris, 1919, p. 137, pl. 43, figs. 8, 9; Brann and Kent, 1960, p. 546

*Callista (Callista) perovata lisbonensis* (Harris), Palmer, 1927/1929, p. 75, pl. 14, figs. 2, 7, copy syntypes, 8; Brann and Kent, 1960, p. 153

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; McBean fm., upper Claiborne gr.

*Localities*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type); base of bluff, Claiborne, Alabama R.; S. C.: Orangeburg Co., 3 and 6 mi. WNW. of Orangeburg

*Types*.—Syntypes, Nos. 1158, 1159 PRI

**Callista (Callista) perovata subvitrea** (de Gregorio)**Veneridae**

*Cytherea aequorea* mut. *subvitrea* de Gregorio, 1890, p. 217, pl. 33, figs. 16-22

*Meretrix perovata* var. *subvitrea* (de Gregorio), Harris, 1919, p. 138, pl. 43, fig. 11; Brann and Kent, 1960, p. 546

*Callista (Callista) perovata subvitrea* (de Gregorio), Palmer, 1927/1929, p. 75, pl. 14, fig. 6; Brann and Kent, 1960, p. 153

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff (type, supposedly the Gosport sd.), Lisbon Bluff, Alabama R.; base of Claiborne Bluff, Alabama R.

*Types*.—Syntypes, No. 26451, De Gregorio Coll. PRI

*Callista (Callista) subimpressa* (Conrad)

See *Macrocallista subimpressa* (Conrad)

*Callista (Callista) sylvaerupis* (Harris)

See *Macrocallista sylvaerupis* (Harris)

**Callocardia**

The type species of the genus *Callocardia* is Recent, off Korea. The genus does not occur in the Cenozoic of North America. See Palmer, 1927/29, p. 38, pl. 7, figs. 1, 4, 11 type species *C. guttata* Adams.

*Callocardia (Agriopoma) amichel* Gardner

See *Pitar* ("Agriopoma") *amichel* (Gardner)

*Callocardia astartoides* Gardner

See *Rhabdopitaria astartoides* (Gardner)

*Callocardia bastropensis* (Harris)

See *Katherinella* ? *trigoniata bastropensis* (Harris)

*Callocardia biboraensis* Gardner

See cf. *Pitar biboraensis* (Gardner)

*Callocardia hawtofi* Gardner

See cf. *Pitar hawtofi* (Gardner)

*Callocardia kempae* Gardner

See cf. *Pitar kempae* (Gardner)

*Callocardia mortoni* (Conrad)

See *Callista (Costacallista) mortoni* (Conrad)

*Callocardia pteleina* Gardner  
See *Pitar pteleina* (Gardner)

*Callocardia (Agriopoma) securiformis* (Conrad)  
See *Pitar (Pitar) securiformis* (Conrad)

*Callocardia (Agriopoma) tornadonis* (Harris)  
See *Pitar (Pitar) tornadonis* (Harris)

*Callocardia* spp.  
See *Pitar* spp.

**Calorhadia (Litorhadia) acala (Dall) Nuculanidae**

*Leda elongatoidea* Aldrich, 1895b, p. 17, in part, not pl. 5, fig. 2  
*Leda acala* Dall, 1898b, p. 586, pl. 32, fig. 3; Schuchert, *et al.*, 1905, p. 344

*Calorhadia (Litorhadia) acala* (Dall), Stewart, 1930, p. 52 in part, type species *Litorhadia* Stewart, 1930; Gardner, 1945, p. 44; Stenzel, Krause and Twining, 1957, p. 50 in part

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox [Sabine] gr.

*Localities*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type); *Choctaw Co.*, Butler

*Type*.—Holotype, No. 145627 USNM

**Calorhadia (? Litorhadia) albirupina (Harris) Nuculanidae**

*Leda albirupina* Harris, 1894b, p. 148, pl. 6, fig. 1; Dall, 1898b, p. 578; Schuchert, *et al.*, 1905, p. 344

*Nuculana albirupina* (Harris), Harris and Palmer, 1946, p. 57, pl. 13, figs. 15, 16; Wilbert, 1953, p. 122, pl. 2, fig. 7; Brann and Kent, 1960, p. 607

*Calorhadia (? Litorhadia) albirupina* (Harris), Stenzel, Krause, and Twining, 1957, p. 52

*Range*.—Upper Eocene. White Bluff fm. (type), lower Jackson gr.

*Localities*.—ARK.: *Jefferson Co.*, White Bluff, Arkansas R. (type); *Drew Co.*, Wadsworth's well, Long Prairie

*Types*.—Syntypes, No. 135140 USNM

**Calorhadia (Litorhadia) aldrichiana (Harris) Nuculanidae**

*Yoldia aldrichiana* Harris, 1897b, p. 53, pl. 8, fig. 15; Brann and Kent, 1960, p. 983. Not *Leda elongatoidea* ? var. Harris, 1896, p. 55, pl. 14, fig. 10 as stated by Harris, 1897b, p. 53 = Midway

*Calorhadia (Litorhadia) aldrichiana* (Harris), Stewart, 1930, p. 52 in part see also *C. acala* (Dall); Stenzel, Krause, and Twining, 1957, p. 50, in part

Comparing the holotype of "*Yoldia*" *aldrichiana* Harris with the type figure of "*Leda*" *acala* Dall, the forms do not appear to be the same. We are separating the species.

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type)

*Type*.—Holotype, No. 155 PRI

**Calorhadia (Litorhadia) aldrichiana sabinetownensis** (Barry) **Nuculanidae**

*Leda aldrichiana* Harris var., Harris, 1899b, p. 301, pl. 53, fig. 5 not var.; Brann and Kent, 1960, p. 473 not as "var."

*Nuculana aldrichiana* var. *sabinetownensis* Barry, 1942+, p. 47, pl. 2, figs. 11-13; Wasem and Wilbert, 1943, p. 192

*Range*.—Lower Eocene. Sabinetown fm. (type), upper Wilcox [Sabine] gr.

*Localities*.—TEXAS: *Sabine Co.*, bluff  $\frac{1}{4}$  mi. downstream from Sabinetown Ferry ldg., (type); cultivated hillside on E. D. Britt's farm in NW.  $\frac{1}{4}$  NW.  $\frac{1}{4}$  sec. 10, T. 5 N., R. 13 W.; water well on D. R. Hayes's land in NW.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  sec. 26, T. 7 N., R. 10 W., depth 35 ft.

*Types*.—Holotype, No. 5074; paratype, No. 5074 A, LSU Pal. Mus.

**Calorhadia (Litorhadia ?) bastropensis** (Harris)**Nuculanidae**

*Leda bastropensis* Harris, 1895a, p. 46, pl. 1, fig. 3; Dall, 1898b, p. 578; Harris, 1919, p. 64, pl. 24, figs. 9, 10; Brann and Kent, 1960, p. 473; not ? Gardner in Trowbridge, 1923, p. 95; not Renick and Stenzel, 1931, p. 104 [*fide* Stenzel, Krause, and Twining]

? Not *Calorhadia (Litorhadia) bastropensis* (Harris), Gardner, 1945, p. 46 [*fide* Stenzel, Krause, and Twining]

*Calorhadia (Litorhadia ?) bastropensis* (Harris), Stenzel, Krause, and Twining, 1957, p. 51, pl. 4, figs. 10, 11

*Range*.—Middle Eocene. Viesca mem., Weches fm. (type), middle Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, bluff on right bank of Colorado R. at Smithville, about 625 ft. downstream from new bridge, on State Highway 71, built in 1950 (type), (Stenzel, Krause, and Twining, 1957); *Sabine Co.*, Sabine R.

*Type*.—Holotype, No. 221, old number, recatalogued, No. 35579 (?) BEG

**Calorhadia bella** (Conrad)**Nuculanidae**

*Nucula bella* Conrad, 1833a, Jan., p. 343; Conrad, App. in Morton 1834, p. 7; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 7; Schenck, 1934, p. 48

*Nucula plicata* Lea, 1833 Dec., p. 85, pl. 3, fig. 64; Conrad, App. in Morton, 1834, p. 7=*N. bella* Conrad; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 35; Schenck, 1934, p. 53

*Leda bella* (Conrad), Conrad, 1854, p. 29; Dall, 1898b, p. 578; Harris, 1919, p. 64, pl. 24, figs. 11-16; Brann and Kent, 1960, pp. 473, 474 fig. 13 not lost same as fig. 11

*Nuculana bella* (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Cossmann, 1893, p. 15 see under *N. Brongniarti* (Lea)

*Nuculana plicata* (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Cossmann, 1893, p. 15

*Leda plicata* (Lea), de Gregorio, 1890, p. 189, pl. 23, figs. 6-10; fig. 11 Lea's type (*L. bella* sp. dubious [in part]); Dall, 1898b, p. 578

*Calorhadia bella* (Conrad), Gardner, 1939, p. 341

*Range*.—Middle Eocene. McBean fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.



*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). LA.: Bienville Par., Marble Quarry; Hammett's Branch (Harris). S.C.: Orangeburg Co., 6 mi. WNW. Orangeburg (Harris)

*Types*.—Possible syntypes (2), No. 30575 ANSP Moore, 1962, p. 41

**Calorhadia (Calorhadia) compsa (Gabb)**

**Nuculanidae**

*Leda compsa* Gabb, 1860d, p. 387, pl. 67, fig. 57; Heilprin, 1891a, p. 403; Gardner in Trowbridge, 1923, p. 95; Deussen, 1924, p. 67

*Nuculana compsa* (Gabb), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Harris and Palmer, 1946, p. 55

*Leda opulenta compsa* Gabb, Harris, 1919, p. 62, pl. 24, figs. 1, 2; Renick and Stenzel, 1931, p. 104

*Calorhadia (Litorhadia) compsa* (Gabb), Gardner, 1945, p. 45

*Calorhadia (Calorhadia) compsa* (Gabb), Stenzel, Krause, and Twinning, 1957, p. 47, pl. 4, figs. 8, 9, 12-14

*Range*.—Middle Eocene. Stone City beds (type) (Stenzel, Krause, and Twinning, 1957), middle Claiborne gr.

*Localities*.—TEXAS: "Caldwell Co." Gabb=Burleson Co., Stone City Bluff, Brazos R., (type); *vide* Stenzel, Krause, and Twinning, 1957, p. 11

*Type*.—Holotype, ANSP

**Calorhadia (Litorhadia) elongatoidea (Aldrich)**

**Nuculanidae**

*Leda elongatoidea* Aldrich, 1895b, p. 17, (in part=*L. acala* Dall), pl. 5, fig. 2; Harris, 1897b, p. 50, pl. 8, fig. 8, not fig. 9=*C. (L.) elongatoidea* "var."; Dall, 1898b, p. 587 not p. 586=*Leda acala* Dall; Trowbridge, 1932, pl. 39, figs. 1, 2; Brann and Kent, 1960, p. 475

Not *Leda elongatoidea* Aldrich "var." Harris, 1896, p. 55, pl. 4, fig. 10 (=Midway Paleocene)

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Choctaw Co., Butler (type); Clarke Co., Woods Bluff, Tombigbee R.; Dale Co., Ozark; Marengo Co., Nana-falia, Tombigbee R. (all except Butler, Harris identification)

*Type*.—Holotype, No. 638962 USNM

**Calorhadia (Litorhadia) elongatoidea (Aldrich) "var."**

**Nuculanidae**

Not *Leda elongatoidea* Aldrich, 1895a, p. 17, pl. 5, fig. 2

*Leda elongatoidea* Aldrich "var.", Harris, 1896, p. 55, pl. 4, fig. 10; Brann and Kent, 1960, p. 476

*Calorhadia (Litorhadia) elongatoidea* (Aldrich) "var.", Stenzel, Krause, and Twinning, 1957, p. 50

*Range*.—Paleocene. Matthews Ldg. mem., Porters Creek fm.; upper Midway gr.

*Locality*.—ALA.: Wilcox Co., Matthews Ldg., Alabama R.

*Type*.—Figured specimen, formerly PRI, lost prior to 1937

**Calorhadia (Litorhadia) elongatoidea (Aldrich) "var."**

**Nuculanidae**

*Leda elongatoidea* Aldrich, Harris, 1897b, p. 50 in part, pl. 8, fig. 9 "var." not fig. 8; Brann and Kent, 1960, p. 475

*Range*.—Lower Eocene. Greggs Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: Monroe Co., Greggs Ldg., Alabama R.

*Type*.—Figured specimen, No. 150 PRI

**Calorhadia equalis (Conrad)**

**Nuculanidae**

*Nucula equalis* Conrad, 1833c, p. 46 (Harris reprint, 1893, p. 72); Conrad, App. in Morton, 1834, p. 7 as *aequalis*; H. C. Lea, 1849, p. 102 as *aequalis*; Harris, 1895b, p. 19 (p. 2 *aequalis*); Schenck, 1934, p. 48. Not J. de Carle Sowerby, 1840a, expl. pl. 39

*Nucula media* Lea, 1833, p. 83, pl. 3, fig. 62; Conrad, App. in Morton, 1834 p. 7=*N. aequalis* Conrad; H. C. Lea, 1849, p. 102; ? Aldrich, 1886, p. 49; Harris, 1895b, p. 27

*Leda aequalis* (Conrad), Conrad, 1854, p. 29; Dall, 1898b, p. 578 "(non Reuss ? + ? *media* Lea, non Wissm.)"

*Nuculana aequalis* (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

*Nuculana media* (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Cossmann, 1893, p. 15

Cf. *Leda media* (Lea), Aldrich, 1886, p. 48; Harris, 1919, p. 65 in part, pl. 25, fig. 4 ? Claiborne, Lisbon Bluff in text; Brann and Kent, 1960, p. 476 in part, No. 602 only

*Leda media* (Lea), de Gregorio, 1890, p. 188, pl. 23, figs. 1-3, fig. 4 copy *media* Lea; Harris, 1919, p. 65 in part, pl. 25, figs. 1-3; Gardner, 1927, p. 365; Brann and Kent, 1960, p. 476 in part, not No. 602

*Calorhadia media* (Lea), Gardner, 1939, p. 341

*Range*.—Middle Eocene. Cf. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr. Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). Cf. Lisbon Bluff, Alabama R.

*Types*.—Probable holotype No. 30719 ANSP Moore, 1962, p. 59.

*Nucula media* Lea, Nos. 5411-5413 ANSP possible syntypes

**Calorhadia (Litorhadia ?) evanescentior Stenzel and Krause Nuculanidae**

*Calorhadia (Litorhadia ?) evanescentior* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 52, pl. 4, figs. 21-25

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

*Types*.—Holotype, No. 20683 BEG (fig. 23); paratypes, No. 20684 BEG (figs 21, 22), No. 20705 BEG (figs. 24, 25), Nos. 20787, 20788 BEG unfig'd paratypes

**Calorhadia (Calorhadia) hammetti (Harris)**

**Nuculanidae**

*Leda opulenta* var. *hammetti* Harris, 1919, p. 62, pl. 23, fig. 23; Brann and Kent, 1960, p. 478

*Nuculana hammetti* (Harris), Harris and Palmer, 1946, p. 55

*Calorhadia (Calorhadia) hammetti* (Harris), Stenzel, Krause, and Twining, 1957, p. 48

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—LA.: Bienville Par., Hammett's Branch, SW. ¼ sec. 30, T. 18 N., R. 6 W., about 2 mi. NE Mt. Lebanon (type)

*Type*.—Holotype, No. 589 PRI

**Calorhadia houstonia** (Harris)**Nuculanidae**

*Leda houstonia* Harris, 1895a, p. 47, pl. 1, fig. 5; Dall, 1898b, p. 578; Harris, 1919, p. 59, (only) not pl. 23, fig. 13 [= *C. trivittata* (Gardner)]; Gimbrede, 1962, pp. 1118, 1119

*Calorhadia houstonia* (Harris), Stenzel, Krause, and Twining, 1957, p. 51

"*Leda* (*Nuculana*) *subtrigona* Con. ? S. Carolina", Harris, 1919, p. 59 specimens so labelled in ANSP *vide* Harris

*Range*.—Middle Eocene. Hurricane lentil (type), base of Landrum mem., Cook Mt. fm., upper Claiborne gr. [Stenzel, Krause, and Twining, 1957, p. 51]

*Localities*.—TEXAS: *Houston Co.*, Alabama Ferry, Trinity R. (type) [*vide* Stenzel, Krause, and Twining 1957, p. 51]; *Lee Co.*, between Orell's and Evergreen Crossing, Elm Creek; along Elm creek from Orell's to Prides Crossing

*Type*.—Holotype, possibly 35568 BEG

**Calorhadia (? Calorhadia) mater** (Meyer)**\* Nuculanidae**

*Leda mater* Meyer, 1885a, p. 460; Meyer, 1886b, p. 79, pl. 3, fig. 20; Harris, 1894b, p. 147; Dall, 1898b, p. 578

*Calorhadia mater* (Meyer), Gardner, 1939, p. 341

*Calorhadia* (*Litorhadia*) *mater* (Meyer), Gardner, 1945, p. 47

*Nuculana mater* (Meyer), Harris and Palmer, 1946, p. 56, pl. 13, figs. 12-14

*Calorhadia* (? *Calorhadia*) *mater* (Meyer), Stenzel, Krause, and Twining, 1957, p. 48

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type). ARK.: *Cleveland Co.*, Vince Ferry, Saline R.; Cross Roads Church, 5 mi. NW of Kingsland. TEXAS: Rio Grande embayment (Gardner)

*Type*.—Holotype, No. 638697 USNM (figured 1886b, pl. 3, fig. 20)

*Calorhadia media* (Lea)

See *Calorhadia equalis* (Conrad)

**Calorhadia (Calorhadia) opulenta** (Conrad)**Nuculanidae**

*Nucula opulenta* Conrad, 1833c, p. 46 (Harris reprint, 1893, p. 72); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 31; Schenck, 1934, p. 52

*Nucula pulcherrima* Lea, 1833, p. 84 in part; H. C. Lea, 1849, p. 102 in part; Harris, 1895b, p. 37 in part one so-called type is yg. of *opulenta*, Conrad, 1854, p. 29

*Nuculana opulenta* (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Stewart, 1930, p. 50; Harris and Palmer, 1946, p. 55, pl. 13, fig. 8 not fig. 9; Brann and Kent, 1960, p. 609

*Leda opulenta* (Conrad), de Gregorio, 1890, p. 189; Dall, 1898b, pp. 578, 587; Harris, 1919, p. 62, pl. 23, figs. 20-22; Brann and Kent, 1960, pp. 477, 478

*Calorhadia opulenta* (Conrad), Gardner, 1939, p. 341

*Calorhadia* (*Calorhadia*) *opulenta* (Conrad), Stenzel, Krause, and Twining, 1957, p. 48

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes (2), No. 30503 ANSP Moore, 1962, p. 81

**Calorhadia cf. opulenta** (Conrad)

**Nuculanidae**

*Nuculana opulenta*—like Harris and Palmer, 1946, p. 56, pl. 13, fig. 9; Brann and Kent, 1960, p. 609

Cf. *Nuculana reginajacksonensis* Wilbert, 1953, p. 123 error for *reginajacksonis*

*Range*.—Upper Eocene. White Bluff fm., lower Jackson gr.

*Locality*.—ARK.: Jefferson Co., White Bluff, S. bank Arkansas R.

*Type*.—Figured specimen, No. 4222 PRI

**Calorhadia (Litorhadia) petropolitana** Stenzel and Krause **Nuculanidae**

*Calorhadia (Litorhadia) petropolitana* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 50, pl. 4, figs. 18-20

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

*Types*.—Holotype, No. 20736 BEG (figs. 18, 19); paratype No. 20738 BEG (fig. 20); No. 20737 BEG unfigured paratypes

**Calorhadia (Calorhadia) pharcida** (Dall)

**Nuculanidae**

*Nuculana protexta* Conrad, 1865a, p. 13; Conrad, 1865c, p. 147, pl. 11, fig. 6; Conrad, 1866a, p. 4. Not *Leda protexta* Gabb, 1860a, p. 303 = *Nuculana protexta* Cretaceous. Not *Nuculana protexta* Conrad, Harris, 1894b, p. 147, Ark., Jackson Eocene

*Leda protexta* (Conrad), Heilprin, 1881, p. 365; Aldrich, 1886, pp. 50, 53, 57; de Gregorio, 1890, p. 190, pl. 23, fig. 14 copy Conrad; Harris, 1897b, p. 52, pl. 8, fig. 13; Brann and Kent, 1960, p. 478; not *Leda protexta* Clark, 1895 p. 5; not Clark, 1896 p. 82 (= *Nuculana potomacensis* Clark and Martin)

*Leda pharcida* Dall, 1898b, p. 587, pl. 32, fig. 8; Schuchert, et al, 1905, p. 346

*Calorhadia pharcida* (Dall), Stewart, 1930, pp. 50, 51 type species *Calorhadia* Stewart

*Nuculana pharcida* (Dall), Harris and Palmer, 1946, p. 55

*Calorhadia (Calorhadia) pharcida* (Dall), Stenzel, Krause, and Twining, 1957, p. 46, 48

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr. Cf. middle Wilcox [Sabine] gr., see localities

*Localities*.—ALA.: Clarke Co., Woods Bluff, Tombigee R. (type); Greggs Ldg., Alabama R.; Bells Ldg., Alabama R. (Aldrich); 4 mi. above Hamilton Bluff, Alabama R.; Dale Co., Ozark. GA.: Clay Co., Ft. Gaines

*Types*.—Holotype, No. 145633 USNM; *Nuculana protexta* Conrad, missing ANSP Moore, 1962, p. 90



**Calorhadia pistorus (Harris)****Nuculanidae**

*Leda pistorus* Harris, 1919, p. 65, pl. 24, figs. 17, 18

*Calorhadia pistorus* (Harris), Gardner, 1939, p. 341

*Range*.—Middle Eocene. Gosport sd, (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Washington Co.*, Bakers Bluff, Tombigbee R. (type); Baker Hill (Gopher Hill), 1 mi. above St. Stephens Bluff, Tombigbee R. (Gardner)

*Type*.—Holotype, No. 67, GSATC

**Calorhadia (Calorhadia) potomacensis (Clark and Martin)****Nuculanidae**

*Leda protexta* (Conrad), Clark, 1895, p. 5; Clark, 1896, p. 82. Not *Nuculana protexta* Conrad, 1865c, p. 147; not Gabb, 1860a, p. 303

*Leda potomacensis* Clark and Martin, 1901, p. 200, pl. 56, figs. 9, 10; Harris and Palmer, 1946, p. 56

*Calorhadia (Calorhadia) potomacensis* (Clark and Martin), Stenzel, Krause, and Twining, 1957, p. 48

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—VA.: *King George Co.*, Woodstock (type); *Caroline Co.*, Port Royal. MD.: *Charles Co.*, Pope's Creek; W. of Port Tobacco; 1 mi SE. of Piscataway; ½ mi. below Chapel Point; *Prince Georges Co.*, Charles Branch between Rosaryville and Upper Marlboro

*Types*.—Syntypes, USNM

**Calorhadia (Calorhadia) praecompsa Stenzel and Krause****Nuculanidae**

*Calorhadia (Calorhadia) praecompsa* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 49, pl. 4, figs. 15-17

*Range*.—Middle Eocene. Viesca mem., Weches fm. (type), middle Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type)

*Types*.—Holotype, No. 20709 BEG, unfigured paratypes, No. 20710 BEG

**Calorhadia (Calorhadia) reginajacksonis (Harris)****Nuculanidae**

*Leda regina-jacksonis* Harris, 1897a, p. 470, pl. 18, fig. 3; Dall, 1898b, p. 587

*Nuculana regina-jacksonis* (Harris), Harris and Palmer, 1946, p. 54, pl. 13, figs. 5-7

*Nuculana reginajacksonis* (Harris), Stewart, 1930, pp. 49, 50 in part; Brann and Kent, 1960, p. 609

*Calorhadia (Calorhadia) reginajacksonis* (Harris), Stenzel, Krause, and Twining, 1957, p. 48

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.; upper Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type). LA.: *Catahoula Par.*, Danville Ldg., Ouachita R. ARK.; *Jefferson Co.*, White Bluff, Arkansas R.

*Types*.—Holotype missing, unfigured paratype, ANSP

**Calorhadia (Calorhadia) reginajacksonis (Harris) "var."****Nuculanidae**

*Nuculana regina-jacksonis* Harris "var.," Harris and Palmer, 1946, p. 54, pl. 13, figs. 10, 11; Brann and Kent, 1960, p. 609



*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.  
*Locality*.—MISS.: Hinds Co., Jackson  
*Type*.—Figured specimen, No. 4223 PRI

**Calorhadia semen (Lea)****Nuculanidae**

*Nucula semen* Lea, 1833, p. 200, pl. 6, fig. 214; H. C. Lea, 1849, p. 102; Aldrich, 1886, p. 49; Harris, 1895b, p. 41; Schenck, 1934, p. 53  
 ? *Nucula mucronata* Conrad, 1848a, p. 297 S.C.; Conrad, 1848b, p. 128, pl. 14, fig. 2 S. C. *fide* Harris, 1919, p. 56 not *mucronata* [sic] as in Harris, 1919, p. 56. Not *Nucula mucronata* J. de C. Sowerby, 1824, p. 120, pl. 476, fig. 4

? *Leda mucronata* (Conrad), Conrad, 1854, p. 29

? *Nuculana mucronata* (Conrad), Conrad, 1865a, p. 13 not Vicksburg

*Nuculana semen* (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 4; Cossmann, 1893, p. 15

*Leda semen* (Lea), de Gregorio, 1890, p. 190, pl. 23, fig. 13 copy Lea; Dall, 1898b, p. 578; Harris, 1919, p. 56, pl. 23, figs. 1-4; Brann and Kent, 1960, p. 479

*Calorhadia semen* (Lea), Gardner, 1939, p. 341

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; McBean fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type); Hamilton Bluff, Alabama R.; Lisbon Bluff, Alabama R. (Harris). S.C.: Orangeburg Co., 3 and 6 mi. WNW. of Orangeburg (Harris); Calhoun Co., "St. Matthew's parish, Orangeburg District" (type) *N. mucronata* Conrad

*Type*.—Lost [*fide* Harris, 1919, p. 56]. *Nucula mucronata* Conrad, missing Moore, 1962, p. 78

**Calorhadia semenoides (Aldrich)****Nuculanidae**

*Leda semenoides* Aldrich, 1895b, p. 18, pl. 5, fig. 5; Dall, 1898b, p. 578 *semenoidea*; Harris, 1919, p. 57, pl. 23, figs. 5, 6; Brann and Kent, 1960, p. 479

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type); Hamilton Bluff, Alabama R. GA.: Clay Co., Fort Gaines

*Type*.—Holotype, No. 638964 USNM

*Camptonectes calvatus* (Morton)

See *Eburneopecten calvatus* (Morton)

*Camptonectes claibornensis* Conrad *nomen nudum*

See *Eburneopecten scintillatus* (Conrad)

*Camptonectes scintillatus* (Conrad)

See *Eburneopecten scintillatus* (Conrad)

*Cardita alticosta* [sic] Conrad

See *Venericardia* (*Claibornicardia*) *alticostata* (Conrad)

*Cardita alticosta* [sic] Gabb, 1869, p. 268 not Conrad=*Cardita arivechensis* Heilprin

See under *Venericardia alticostata* (Conrad)

*Cardita alticostata* ConradSee *Venericardia* (*Claibornicardia*) *alticostata* (Conrad)See also *Venericardia* (*Claibornicardia*) *sillimani* (Lea)*Cardita bilineata* ConradSee *Venericardia bilineata* (Conrad)*Cardita bilineata* Tuomey, 1848, p. 153; Harris, 1919, p. 200 *nomen nudum*; not *Cardita bilineata* Conrad, 1848a and bSee *Venericardia bilineata* (Conrad)*Cardita brittoni* WhitfieldSee *Venericardia brittoni* (Whitfield)*Cardita carolinensis* ConradSee *Venericardia carolinensis* (Conrad)*Cardita decusata* [sic] Tuomey, 1858, p. 271 *nomen nudum*. Not *V. decussata* Lamarck, 1806, p. 59See *Venericardia* (*Venericor*) *greggiana* Dall*Cardita densata* ConradSee *Venericardia* (*Venericor*) *densata* (Conrad)*Cardita* "dorsata Conrad", Cossmann, 1893, p. 14 [typ. error] for *Cardita densata* Conrad*Cardita inflator* (Meyer)See *Venericardia* (*Pleuromeris*) *inflator* Meyer*Cardita intermedia* WhitfieldSee *Venericardia intermedia* (Whitfield)*Cardita parva* (Lea)See *Venericardia* (*Pleuromeris*) *parva* Lea*Cardita perantiqua* (Conrad)See *Venericardia* (?) *perantiqua* Conrad*Cardita planicosta* (Lamarck), Conrad in Emory, 1857, p. 161, pl. 19, figs. 2a, 2b; Schuchert, *et al.*, 1905, p. 127, No. 9900See *Venericardia densata* (Conrad), Gardner, and Bowles, 1939, p. 189 or *V. mooreana* Conrad, 1867c, Texas*Cardita planicosta* of authors*Cardita planicosta* Conrad, 1832a; Conrad, App. in Morton, 1834; H. C. Lea, 1849; Heilprin, 1884b, Cossmann, 1893. Not *C. planicosta* (Lamarck)See *Venericardia* (*Venericor*) *regia* Conrad*Cardita* (*Venericardia*) *planicosta* Lamarck, de GregorioSee *Venericardia* (*Venericor*) *claiboplata* Gardner and Bowles*Cardita planicosta* var. *regia* (Conrad)See *Venericardia* (*Venericor*) *regia* Conrad*Cardita rotunda* (Lea)See *Venericardia rotunda* Lea*Cardita subquadrata* Conrad, 1848a; not Gabb, 1860a, not Gabb, 1860dSee *Venericardia* (?) *subquadrata* (Conrad)

*Cardita subquadrata* Gabb, 1860a, p. 303; not Gabb, 1860d, p. 395; not Conrad, 1848a

See *Venericardia perantiqua* (Gabb)

*Cardita subquadrata* Gabb, 1860d, p. 395; not Gabb, 1860a, p. 303; not Conrad, 1848a

See *Venericardia* (*Venericor*) *hijuana* Gardner and Bowles

*Cardita subrotunda* Conrad

See *Venericardia subrotunda* (Conrad)

*Cardita tetrica* Conrad *nomen nudum*

*Cardita tetrica* Conrad in Wailes 1854, p. 289 *nomen nudum* (reprint, 1939, p. 19); Aldrich, 1885c, p. 307; Heilprin, 1891a, p. 403; Dall, 1903a, p. 1424; Harris and Palmer, 1946, pp. 69, 70 under *V. diversidentata* Meyer

*Venericardia tetrica* (Conrad), Harris, 1894b, p. 149; Dall, 1903a, pp. 1427, 1429

The name is a *nomen nudum* although used by Aldrich, Harris, and Dall in comparison with or equivalent to other species.

*Cardita* (*Venericardia*) *transversa* Lea

See *Venericardia* (*Claibornicardia*) *alticostata* (Conrad)

See also *Venericardia* (*Claibornicardia*) *sillimani* Lea

*Cardita* (*Venericardia*) *transversa* Mut. *juvenis* de Gregorio

See *Venericardia* (*Pleuromeris*) *parva* Lea

*Cardita* (*Venericardia*) *transversa* Mut. *rotunda* Lea

See *Venericardia* (*Venericardia*) *rotunda* Lea

*Cardita* (*Venericardia*) *transversa* Mut. *secans* de Gregorio

See *Venericardia* (*Claibornicardia*) *sillimani* Lea

*Cardita* (*Venericardia*) *transversa* Mut. *Sillimani* Lea

See *Venericardia* (*Claibornicardia*) *sillimani* Lea

*Cardita* (*Venericardia*) *transversa* (Lea) Mut. *transversa* Lea

See *Venericardia alticostata* (Conrad)

*Cardita trapezium* Tuomey

See *Venericardia* (?) *trapezium* (Tuomey)

*Cardita vigintinaria* Conrad

See *Venericardia vigintinaria* (Conrad)

*Cardium* (*Anthocardia* [sic]) *avonum* Richards

See *Trigonocardia* (*Americardia*) *avona* (Richards)

*Cardium* cf. *cabezai* (Gardner)

See *Cardium* sp.

*Cardium* (*Trachycardium*) *claibornense* Aldrich

See *Agnocardia claibornensis* (Aldrich)

*Cardium* cf. *C. claibornense* Aldrich, Richards and Palmer, 1953

See *Cardium* sp.

*Cardium* (*Trachycardium*) *claibornense* Aldrich, Harris, 1919 in part

See *Cardium* sp.

*Cardium* (*Agnocardia*) cf. *claibornense* Aldrich, Harbison, 1944  
See *Agnocardia* sp.

*Cardium diversum* Conrad, Tuomey, 1858, Bells Ldg., Monroe Co., Ala.  
Not *Cardium diversum* Conrad, 1848a, p. 292=Vicksburg Oligocene

***Cardium diversum* "var." mittens de Gregorio** **Cardiidae**

*Cardium diversum* var. *mittens* de Gregorio, 1890, p. 215, pl. 33, figs. 5, 6; Vicksburgian fide Harris, 1919, p. 201 *Curdium* [sic] typ. error

Range.—?

Locality.—?

Type.—Holotype, formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost

*Cardium eversum* Conrad, Harris, 1951  
See *Cardium* spp.

*Cardium gardnerae* Cooke  
See *Laevicardium gardnerae* (Cooke)

***Cardium harrisi* Vaughan** **Cardiidae**

*Cardium* sp. Harris, 1894b, p. 142

*Cardium harrisi* Vaughan, 1895, p. 219 *nomen nudum*; Vaughan, 1896, pp. 20, 37, 48, pl. 4, figs. 1, 2

*Cardium* (*Tropidocardium*) *Harrisi* Vaughan, Dall, 1900, p. 1092

*Cardium harrisi* Vaughan, Harris, 1919, p. 131, pl. 41, figs. 5-6 type, fig. 7; Brann and Kent, 1960, p. 174

Range.—Middle Eocene, Cook Mt. fm. (type), upper Claiborne gr.

Localities.—LA.: Winn Par., S. of marble quarry (Harris); *Bienville* Par., Mount Lebanon (type); see Vaughan for further La. localities. ALA.: *Monroe* Co., Lisbon Bluff, Alabama R.; base of Claiborne Bluff, Alabama R. ARK.: *Ouachita* Co., Walnut Bluff, Ouachita R.

Type.—Holotype, No. 147045 USNM

***Cardium harrisi gainesense* Harris** **Cardiidae**

*Cardium harrisi* var. *gainesense* Harris, 1919, p. 131 footnote, p. 132, Fort Gaines, Ga.

This subspecies was not figured or adequately described by Harris. The type was lost probably in preparation. The name would best be regarded as a *nomen nudum*.

Range.—Lower Eocene

Locality.—GA.: *Clay* Co., Fort Gaines

Type.—Holotype, lost

*Cardium hatchetigbeensis* Aldrich

See *Acanthocardia* (*Schedocardia*) *hatchetigbeensis* (Aldrich)

***Cardium knappi* Weller** **Cardiidae**

*Cardium knappi* Weller, 1907, p. 595, pl. 66, figs. 4-7

Range.—Paleocene. Hornerstown fm. (type). Lower Eocene. Vincentown fm. (type). [type age not discriminated]

Localities.—N.J.: *Monmouth* Co., near Deal (syntype); *Ocean* Co., New Egypt (syntype); *Burlington* Co.; near Juliustown (syntype) [type locality not selected]

Types.—Syntypes, Nos. 7477, 7478, 7486 State Mus., Trenton, N.J.

*Cardium* (*Protocardia*) *lene* Conrad  
See *Nemocardium lene* (Conrad)

*Cardium* (*Dinocardium*) *levyi* Richards  
See *Laevicardium* (*Dinocardium*) *levyi* Richards

*Cardium nicoletti* Conrad  
See *Nemocardium nicoletti* (Conrad)

*Cardium nicoletti* Conrad, Tuomey, 1858, pp. 264, 271  
See *Nemocardium harrisi* (Dall)

*Cardium nicoletti* Conrad "var." Aldrich, 1886  
See *Nemocardium harrisi* (Dall)

***Cardium nucleolum* (Whitfield)**

**Cardiidae**

*Criocardium nucleolus* Whitfield, 1885, p. 214, pl. 28, figs. 10, 11;  
Whitfield, 1899, p. 156

*Cardium nucleolus* (Whitfield), Weller, 1907, p. 575, pl. 63, figs. 8, 9  
type

Range.—Lower Eocene. Manasquan fm. (type)

Locality.—N. J.: Monmouth Co., Farmingdale (type)

Type.—Syntype, No. 9013/1 AMNH

*Cardium ouachitense* Harris  
See *Trachycardium ouachitense* (Harris)

*Cardium palmerae* Harbison  
See *Laevicardium* (*Dinocardium*) *palmerae* (Harbison)

*Cardium* (*Trigoniocardium*) *protoaliculum* Richards  
See *Trigoniocardium protoaliculum* Richards

*Cardium tuomeyi* Aldrich  
See *Acanthocardia* (*Schedocardia*) *tuomeyi* (Aldrich)

*Cardium tuomeyi* Aldrich, Harris, 1899b  
See *Acanthocardia* (*Schedocardia*) *tuomeyi* (Aldrich) subsp.

*Cardium tuomeyi* Aldrich "var.", Harris, 1899b; Barry, 1942+  
See cf. *Plagiocardium* sp.

*Cardium vicksburgense* Tuomey, 1858  
See *Acanthocardia* (*Schedocardia*) *tuomeyi* (Aldrich)

**"Cardium" sp.**

**Cardiidae**

*Cardium* sp. Gardner, 1935, p. 179

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS: Milam Co., Brazos R., 1 mi. below Falls Co.  
line

Type.—Unfigured specimen, not found USNM, 1962

*Cardium* sp. Harris, 1894b, p. 142  
See *Cardium harrisi* Vaughan

***Cardium* sp.**

**Cardiidae**

*Cardium eversum* Conrad, Harris, 1951, p. 24, pl. 12, figs. 9, 10; Brann  
and Kent, 1960, p. 174. Not Conrad, 1848a; p. 291



*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.  
*Locality*.—FLA.: Marion Co., Dixie Lime Products Co., Reddick  
*Types*.—Figured specimens, Nos. 24514, 24515 PRI

**Cardium sp.****Cardiidae**

*Cardium* sp. Harris, 1894b, p. 34, pl. 1, fig. 8; Harris 1896, [no. p.], pl. 6, fig. 3

*Range*.—Paleocene. Kincaid fm., lower Midway gr.  
*Locality*.—TEXAS: Maverick Co., USGS sta. 583, 18 mi. SE. of Eagle Pass (C. A. White, 1877 see Gardner, 1935, p. 99)  
*Type*.—Figured specimen (USNM, 1894)

**Cardium sp.****Cardiidae**

*Cardium* cf. *cabezai* (Gardner), Harris, 1951, p. 23, pl. 12, figs. 3, 4 probably not Gardner, 1945, p. 102; Brann and Kent, 1960, p. 173

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.  
*Locality*.—FLA.: Marion Co., Ocala Lime Rock Corp., quarry E. side of Highway 314, Gainesville to Ocala, E. of Kendrick  
*Type*.—Figured specimen, No. 24509 PRI

**"Cardium" sp.****Cardiidae**

*Cardium eversum* ? Conrad, Harris, 1951, p. 23, pl. 12, fig. 5; Brann and Kent, 1960, p. 174 not Conrad, 1848a, p. 291

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.  
*Locality*.—FLA.: Marion Co., Dixie Lime Products Co. "dump", Reddick  
*Type*.—Figured specimen, No. 24510 PRI

**Cardium sp.****Cardiidae**

*Cardium* sp., Harris, 1951, p. 23, pl. 12, figs. 6-8, 11, 12; Brann and Kent, 1960, p. 178

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.  
*Locality*.—FLA.: Marion Co., Dixie Lime Products Co., Reddick; Ocala Lime Rock Corp., E. of Kendrick  
*Types*.—Figured specimens, Nos. 24511-24513, 24516, 24517 PRI

**"Cardium" sp.****Cardiidae**

*Cardium* (*Trachycardium*) cf. *C. claibornense* Aldrich, Richards and Palmer, 1953, p. 52, pl. 11, figs. 5, 6

*Range*.—Middle Eocene. Avon Park ls. Upper Eocene. Inglis fm., lower Ocala gr.  
*Localities*.—FLA.: Levy Co., pit 2.9 mi. S. of Gulf Hammock; Sulphur Springs, Wekiva R., SW.  $\frac{1}{4}$  sec. 32, T. 14 S., R. 16 E. (See Richards and Palmer, 1953, p. 5)  
*Types*.—Figured specimens No. I-7570, No. I-7569, Fla. Geol. Sur.

**Cardium sp.****Cardiidae**

*Cardium* sp. Barry, 1942+, p. 67, pl. 8, fig. 2

*Range*.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr.  
*Locality*.—LA.: Sabine Par., rd. cut in center sec. 12, T. 8 N., R. 14 W.  
*Type*.—Figured specimen, No. 5018, LSU Pal. Mus.

**"Cardium" sp.****Cardiidae**

*Cardium* (*Trachycardium*) *claibornense* Aldrich, Harris, 1919, p. 132 in part, pl. 41, fig. 9

*Range*.—Middle Eocene. Weches fm., middle Claiborne gr.

*Locality*.—TEXAS: *Burleson Co.*, Collier's Ferry (= Black Shoals, Brazos R., *vide* Stenzel, Krause, and Twining, 1957, p. 106)

*Type*.—Figured specimen lost (*vide* Rodda, Bur. Ec. Geol. Univ. Texas, 1963)

*Caryatis Delawareensis* Conrad, 1868, p. 731; Conrad, 1869b, not *Dione Delawareensis* Gabb, 1860a

See *Pitar ovalis* (Whitfield)

*Caryatis exigua* Conrad

See ? *Pitar exigua* (Conrad)

*Caryatis ovalis* Whitfield

See *Pitar ovalis* (Whitfield)

*Caryatis ? veta* Whitfield

See *Pitar vetus* (Whitfield)

See also under *Glossus veta* (Conrad)

**Caryocorbula alabamiensis (Lea)****Corbulidae**

*Corbula nasuta* Conrad, 1833b, p. 38; not pl. 20, fig. 2 as in text; Conrad, 1835a (Harris reprint, 1893, p. 60, pl. 19, fig. 4); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846c, p. 398, pl. 4, fig. 4; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 382; Tuomey, 1858, pp. 265, 273; Conrad, 1865a, p. 3; Conrad, 1866a, p. 8; Aldrich, 1886, p. 48 [listed]; Harris, 1895b, p. 30

Not *Corbula nasuta* G. B. Sowerby I, 1833b, p. 35; not *Corbula nasuta*, Conrad, 1857 p. 161 = *Corbula conradi* Dall; not *C. nasuta* Clark, 1895, 1896 = *Corbula* sp.

*Corbula Alabamiensis* Lea, 1833, p. 45, pl. 1, fig. 12; Conrad, 1846c, p. 398; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 382; Conrad, 1865a, p. 3 (under *nasuta*); Cossmann, 1893, p. 6; Harris 1895b, p. 3; Harris, 1919, p. 185, pl. 56, figs. 9-10 variations cf. *ima*, 16-26; Brann and Kent, 1960, pp. 253-254

*Corbula subnasuta* d'Orbigny, 1850, p. 382 for *C. nasuta* Conrad not G. B. Sowerby I, 1833a, p. 35

*Corbula (Neaera) nasuta* Conrad, de Gregorio, 1890, p. 231, pl. 36, fig. 36 copy *C. alabamiensis* Lea; figs. 37, 38 copies Conrad; figs. 39-50; pl. 37, figs. 1-4

*Corbula (Cuneocorbula) alabamiensis* Lea, Dall, 1898b, p. 841 in part *Caryocorbula alabamiensis* (Lea), Gardner, 1926b, p. 46 type species *Caryocorbula* Gardner; Gardner, 1928, p. 230; Vokes, 1945, p. 11, pl. 1, figs. 16-20; Stenzel, Krause, and Twining, 1957, pp. 165, 166, pl. 19, figs. 8-13; pl. 20, figs. 1-3, 9, 10; text fig. 27

*Corbula (Caryocorbula) alabamiensis* Lea, Harris, and Palmer, 1946, p. 115, pl. 24, fig. 16; Brann and Kent, 1960, p. 254

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type). See Harris, 1919, p. 187 for localities

*Types*.—Holotype, No. 5039 ANSP. Syntypes (12), *Corbula nasuta* Conrad, No. 30537 ANSP Moore, 1962, p. 80

**Caryocorbula alabamiensis citronella** (Harris) **Corbulidae**

*Corbula alabamiensis citronella* Harris, 1919, pp. 185, 186, pl. 56, figs. 12, 13; Brann and Kent, 1960, p. 255

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S. C.: Orangeburg Co., Orangeburg (type)

*Types*.—Syntypes, Nos. 1284, 1285 PRI

**Caryocorbula alabamiensis gregorioi** (Cossmann) **Corbulidae**

*Corbula compressa* var. *gregorioi* Cossmann, 1893, p. 6, pl. 1, figs. 4, 5

*Corbula (Cuneocorbula) gregorioi* Cossmann, Dall, 1898b, pp. 841, 843, in part

*Corbula alabamiensis ? gregorioi* Cossmann, Harris, 1919, pp. 186, 188, pl. 56, figs. 14, 15; Brann and Kent, 1960, p. 255

*Corbula (Varicorbula) gregorioi* Cossmann ?, Gardner, 1945, p. 129 in part, not pl. 9, figs. 11, 12

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5578, Lab. Géol., Sorbonne, Paris

**Caryocorbula alabamiensis variation "ima"** (de Gregorio) **Corbulidae**

*Corbula (Neaera) nasuta* var. *ima* de Gregorio, 1890, p. 231, pl. 37, figs. 5-8

*Corbula alabamiensis* var. *ima* de Gregorio, Cossmann, 1893, p. 6; Harris, 1919, p. 185, pl. 56, figs. 9, 10 close to *ima*; Brann and Kent, 1960, p. 254

*Corbula (Cuneocorbula) alabamiensis* (Lea) *ima* in synonymy, Dall, 1898b, p. 841 in part, p. 842 questions

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily, lost

**Caryocorbula alabamiensis variation "tecla"** (de Gregorio) **Corbulidae**

*Corbula (Neaera) nasuta* var. *tecla* de Gregorio, 1890, p. 231, pl. 37, figs. 9-11

*Corbula alabamiensis* var. *tecla* de Gregorio, Cossmann, 1893, p. 6; Harris, 1919, p. 185, pl. 56, figs. 27-30; Brann and Kent, 1960, p. 255

*Corbula nasuta* var. *tecla* de Gregorio, Dall, 1898b, p. 842, in *C. densata* Conrad

Because "variety" is not recognized by the International Code Zool. Nomen. (1961), and we hesitate to make the form a subspecies in a group as variable as *C. alabamiensis*, we are including De Gregorio's varietal names for reference only.

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily, lost

**Caryocorbula augustae** Gardner**Corbulidae**

*Corbula* (*Caryocorbula*) *augustae* Gardner, 1927, p. 376, figs. 32, 33

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.  
*Localities*.—TEXAS: *Houston Co.*, Augusta (type)

*Types*.—Syntypes, Nos. 369, 242 USNM

**Caryocorbula cappa** Barry**Corbulidae**

*Corbula* (*Caryocorbula*) *cappa* Barry, 1942+, p. 74, pl. 10, figs. 6-17

*Range*.—Lower Eocene. Pendleton Ferry fm., middle Wilcox [Sabine] gr.; Sabinetown fm. (type), upper Wilcox [Sabine] gr.

*Localities*.—TEXAS: *Sabine Co.*, bluff  $\frac{1}{4}$  mi. downstream from Sabinetown Ferry landing, Sabine R. (type); water well on D. R. Haye's land NW.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  sec. 26, T. 7 N., R. 10 W. LA.: *Sabine Par.*,  $\frac{1}{4}$  mi. upstream from bridge over Sabine R. on La. Highway 6, stream bank in SW.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  SE.  $\frac{1}{4}$  sec. 3, T. 5 N., R. 13 W.

*Types*.—Holotype, No. 5229; paratypes, Nos. 5033, 5230, 5231, L. S. U. Pal. Mus.

**Caryocorbula coloradoensis** Gardner**Corbulidae**

*Corbula* (*Caryocorbula*) *coloradoensis* Gardner, 1935, p. 192, pl. 19, figs. 7-10

*Range*.—Paleocene. Wills Point fm. (type), upper Midway gr.

*Localities*.—TEXAS: *Bastrop Co.*, Colorado R.  $1\frac{1}{2}$ -2 mi. below Travis-Bastrop Co. line (type). For additional localities see Gardner, 1935

*Types*.—Syntypes (2), Nos. 370970, 370992 ("paratype") USNM

**Caryocorbula densata** (Conrad)**Corbulidae**

*Corbula densata* Conrad in Wailes, 1854, p. 289, pl. 14, fig. 9 (reprint 1939, p. 19, pl. 1, fig. 9); Conrad, 1856a, p. 258 (reprint 1939, p. 4); Conrad, 1865a, p. 3; Conrad, 1866a, p. 24; Meyer, 1885a, p. 462; Harris, 1919, p. 185, pl. 56, figs. 31-33; Richards and Palmer, 1953, p. 54, pl. 12, figs. 8, 9; Brann and Kent, 1960, p. 260

*Corbula filosa* Conrad, 1865b, p. 137, pl. 10, fig. 7; not Conrad 1865c, p. 145, pl. 20, fig. 5 Vicksburg; Conrad, 1866a, p. 24

*Corbula* (*Cuneocorbula*) *densata* Conrad, Dall, 1898b, p. 842 in part  
*Corbula* (*Caryocorbula*) *densata* Conrad, Harris and Palmer, 1946, p. 115, pl. 24, figs. 11-15, 17-21; Brann and Kent, 1960, p. 261

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr. [Middle Eocene. Gosport sd., uppermost Claiborne gr. (Harris).]

*Localities*.—MISS.: *Clarke Co.*, Garland Cr.; *Hinds Co.*, Jackson (type); *Caldwell Co.*, Gibson's Ldg. Ouachita R.; *Yazoo Co.*, Sims Siding about 8 mi. N. of Yazoo City. LA.: *Grant Par.*, Montgomery, Red R. ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (Harris). ARK.: *St. Francis Co.*, Crow Cr. FLA.: *Levy Co.*, Inglis; Gulf Hammock (Richards and Palmer, 1953, p. 55)

*Types*.—Syntypes (2), No. 13189 ANSP Moore, 1962, p. 53, [found after 1946]. Holotype, *C. filosa* Conrad, No. 13215 ANSP

**Caryocorbula deusseni (Gardner)****Corbulidae**

- Corbula alabamiensis* Lea small var., Vaughan, 1896, p. 47
- Corbula alabamiensis* Lea with vars., Harris, 1919, p. 185 in part, pl. 56, fig. 11 ? not other figures; Brann and Kent, 1960, p. 253
- Corbula gregorioi* Cossmann of authors, not Cossmann, 1893, *fide* Gardner in Deussen, 1924, p. 68 Texas Claiborne gr. lists
- Corbula (Cuneocorbula) deusseni* Gardner in Deussen, 1924, p. 68, pl. 22, figs. 8, 8a
- Corbula alabamiensis* Lea, Price and Palmer, 1928, p. 23; Renick and Stenzel, 1931, p. 103
- Corbula deusseni* Gardner, Renick and Stenzel, 1931, p. 103 cf.; Trowbridge, 1932, pl. 41, figs. 8, 9 copies type
- (?) *Corbula (Caryocorbula) carli* Gardner + (?) *Corbula (Caryocorbula) santanensis* Gardner, 1945, pp. 134, 136, pl. 9, figs. 20, 10, 15 *fide* Stenzel, Krause, and Twining, 1957, p. 166
- (?) *Corbula (Caryocorbula) conradi* Dall in part + (?) *Corbula (Caryocorbula)* sp. cf. *C. (C.) conradi* Dall + (?) *Corbula* sp. cf. *C. (Caryocorbula) conradi* Dall + (?) *Corbula (Caryocorbula)* sp. cf. *C. (C.) engonata* Conrad, Gardner, 1945, pp. 133-135, pl. 9, figs. 13, 16, 14, 6 *fide* Stenzel, Krause, and Twining, 1957, p. 166
- Caryocorbula deusseni* (Gardner), Stenzel, Krause, and Twining, 1957, p. 166, pl. 20, figs. 4-8, 11-21

*Range*.—Middle Eocene. Viesca mem. (type), Weches fm. middle Claiborne gr.; Stone City fm., middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (Bur. Econ. Geol. loc. No. 11-T-2) (type); *Atascosa Co.*,  $\frac{1}{4}$  mi. W. of Jourdanton

*Type*.—Holotype, No. 371791 USNM lost (*fide* Wilson list 9/17/61 pers. com.)

**Caryocorbula engonatooides Gardner****Corbulidae**

- Corbula (Caryocorbula) engonatooides* Gardner, 1927, p. 375, figs. 30, 31; Gardner, 1945, p. 134, pl. 9, figs. 18, 19, 23 Mexican

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.; Laredo fm., upper Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type). MISS.: *Clarke Co.*, Wautubbee. MEXICO: *State of Nuevo León*, Carlos Cantu, China (Gardner)

*Types*.—Syntypes, Nos. 369250 USNM

**Caryocorbula kennedyi Gardner****Corbulidae**

- Corbula (Caryocorbula) kennedyi* Gardner, 1935, p. 191, pl. 19, fig. 5

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Uvalde Co.*, limestone ledge just above trail leading down from Evans' (Myrick's) apiary, Frio R. (type). See Gardner for additional localities

*Type*.—Holotype, No. 370926 USNM



**Caryocorbula willistoni** (Meyer)**Corbulidae**

*Corbula Alabamensis* Owen, 1860, pp. 35, 417, pl. 9, figs. 8, 8a; Call, 1891, p. 8. Not *C. Alabamensis* Lea, 1833, p. 45

*Corbula willistoni* Meyer, 1885a, p. 462

*Corbula nasuta* Conrad, Harris, 1894b, p. 156 in part; not *C. nasuta* Conrad, 1833b, p. 38

*Corbula (Caryocorbula) willistoni* Meyer, Harris and Palmer, 1946, p. 116, pl. 24, figs. 22-25; Brann and Kent, 1960, p. 275

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type); *Yazoo Co.*, Sims Siding, N. of Yazoo City. ARK.: *St. Francis Co.*, Crow Cr. LA.: *Caldwell Par.*, Wyatt's [sic] [Wyants] Bluff; *Ouachita R.*; *Catahoula Par.*, Danville Ldg., *Ouachita R.*

*Types*.—Syntypes, No. 75 GSATC

**Caryocorbula willistoni arkansia** Harris**Corbulidae**

*Corbula nasuta* Conrad, Harris, 1894b, p. 156 in part *vide* Harris; not *C. nasuta* Conrad, 1833b, p. 38

*Corbula (Caryocorbula) willistoni* var. *arkansia* Harris in Harris and Palmer, 1946, p. 116, pl. 24, figs. 26-28; Wilbert, 1953, pp. 99, 123 not *wieeistoni* [sic]; Brann and Kent, 1960, p. 275

*Range*.—Upper Eocene. White Bluff fm. (type), lower Jackson gr.

*Localities*.—ARK.: *Jefferson Co.*, White Bluff, Arkansas R. (type); *St. Francis Co.*, Crow Cr. LA.: *Vernon Par.*, Bayou Toro

*Types*.—Holotype, No. 4422; paratype, No. 4423 PRI

**Caryocorbula** sp.**Corbulidae**

*Corbula (Caryocorbula) conradi* Dall, Gardner, 1945, p. 133 in part, not pl. 9, figs. 13, 16. Texas localities only

*Range*.—Middle Eocene. Claiborne gr.

*Localities*.—TEXAS: *Webb Co.*; *Zapata Co.* (Gardner)

*Type*.—Specimens, unknown. Not at USNM

**Caryocorbula** sp.**Corbulidae**

*Corbula (Caryocorbula)* sp. Barry, 1942+, p. 75, pl. 10, fig. 4

*Range*.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr.

*Locality*.—LA.: *Sabine Par.*, ravine in center of NW.  $\frac{1}{4}$  sec. 1, T. 9 N., R. 12 W. (This locality is about  $\frac{1}{3}$  mi. E. of locality on Ferrell farm cited by Harris and Veatch, 1899, p. 72)

*Type*.—Figured specimen, No. 5029 LSU Pal. Mus.

**Caryocorbula** sp.**Corbulidae**

*Corbula (Caryocorbula)* sp. Gardner, 1935, p. 192, pl. 19, figs. 11, 12

*Range*.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: *Medina Co.*, Hondo Cr.,  $\frac{1}{8}$  mi. below Elstone Cr.

*Type*.—Figured specimen, No. 370927 USNM

**Caryocorbula** sp. indet.**Corbulidae**

*Corbula (Caryocorbula)* sp. indet. Gardner, 1935, p. 194, pl. 19, fig. 6

*Range*.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: *Ulvalde Co.*, Frio R., just above the trail leading down from the Evans' (Myrick's) apiary

*Type*.—Figured specimen, No. 370925 USNM

*Ceronia singleyi* Harris

See *Mesodesma singleyi* (Harris)

### **Chama gainesensis** Harris

**Chamidae**

*Chama gainesensis* Harris, 1896, p. 66, pl. 6, figs. 4, 4a; Dall, 1903a, p. 1397; Brann and Kent, 1960, pp. 192, 193

*Range*.—Paleocene. Upper Midway gr. (type)

*Locality*.—GA.: *Clay Co.*, Fort Gaines, Chattahoochee R. (uppermost bed) (type)

*Types*.—Syntypes. Nos. 66, 67 PRI

### **Chama harrisi** (Gardner)

**Chamidae**

*Chama monroensis* Aldrich, Harris, 1919, p. 130 in part, pl. 41, figs. 2, 3, not fig. 1; Brann and Kent, 1960, p. 193. Not *Chama monroensis* Aldrich, 1903, p. 100

*Pseudochama harrisi* Gardner, 1927, p. 372, figs. 43, 44

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: *Clarke Co.*, 8 mi. W. of Enterprise (type); Wautubbee

*Type*.—Holotype, No. 139451 USNM

*Chama mississippiensis* Conrad, Cossmann, 1893; Harris and Palmer, 1946; not Conrad, 1848a

See cf. *Chama* spp.

### **Chama monroensis** Aldrich

**Chamidae**

*Chama monroensis* Aldrich, 1903, p. 100, pl. 4, fig. 15; Harris, 1919, p. 130 in part, pl. 41, fig. 1 copy Aldrich; not figs. 2, 3 = *C. harrisi* Gardner. Not Brann and Kent, 1960, p. 193

*Range*.—Middle Eocene. "*Ostrea sellaeformis* bed" (type), Cook Mt. fm., upper Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, "White Marl bed" (type)

*Type*.—Holotype, No. 639019 USNM

*Chama monroensis* Aldrich, Harris, 1919 not Aldrich, 1903

See *Chama harrisi* (Gardner)

### **Chama richardsi** Harbison

**Chamidae**

*Chama richardsi* Harbison, 1944, p. 5, pl. 2, figs. 5, 6

*Range*.—Upper Eocene. Santee ls. (type), upper Claiborne gr.

*Locality*.—S.C.: *Berkeley Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (type)

*Types*.—Holotype and paratype, No. 16410 ANSP

### **Chama** sp.

**Chamidae**

*Chama mississippiensis* Conrad ?, Harris and Palmer, 1946, p. 92, pl. 20, figs. 14, 15; Brann and Kent, 1960, p. 193; probably not *C. mississippiensis* Conrad, 1848a, p. 294

<sup>1</sup>  
*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.  
*Locality*.—LA.: *Grant Par.*, Montgomery, Red R.  
*Type*.—Figured specimen, No. 4341 PRI

**Chama sp.****Chamidae**

*Chama mississippiensis* Conrad, Cossmann, 1893, p. 11, not *Chama mississippiensis* Conrad, 1848a, p. 294 (Oligocene)

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—MISS.: *Clarke Co.*, Wautubbee

*Type*.—Unfigured specimen, No. 9885, Lab. Géol., Sorbonne, Paris

*Chama sp.* Harris, 1919

See *Pseudochama sp.*

**Chama sp. a****Chamidae**

*Chama sp. a* Kellum, 1926, p. 23, pl. 3, fig. 5

*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.

*Locality*.—N. C.: *New Hanover Co.*, Wilmington

*Type*.—Figured specimen, No. 353260 USNM

**Chama sp. b****Chamidae**

*Chama sp. b* Kellum, 1926, p. 23, pl. 3, fig. 6

*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.

*Localities*.—N. C.: *New Hanover Co.*, Wilmington; *Pender Co.*, Old Rocky Pt.

*Type*.—Figured specimen, No. 353248 USNM

*Chlamys anatypes* (Morton)

See *Flexopecten anatypes* (Morton)

**Chlamys beverlyi** Tucker [Rowland]**Pectinidae**

*Pecten (Chlamys) gilbertharrisi* Tucker [-Rowland], 1931, p. 243 in part, pl. 1, fig. 1. Not *P. gilbertharrisi* F. and H. Hodson, 1927, p. 28

*Chlamys (Chlamys) beverlyi* Tucker [-Rowland], 1934, p. 614; Tucker-Rowland, 1936b, p. 997, pl. 8, figs. 7, 8

*Pecten (Chlamys) beverlyi* Tucker, Harris and Palmer, 1946, p. 30, pl. 8, figs. 1-5; Brann and Kent, 1960, p. 656

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr. Not Jackson Eocene as originally stated.

*Localities*.—ALA.: *Monroe Co.*, Lisbon, Alabama R. (type).

TEXAS: *Sabine Co.*, Sabine R. not "below Robinsons Ferry" = Jackson Eocene. Exact locality not known, see Veatch Survey, 1902, p. 129

Original data of this species are incorrect in stating Lisbon, Ala., as Jackson Eocene. If the Sabine R. specimen were from a Jackson Eocene locality then the original description contains two forms.

*Type*.—Holotype, presumably CNHM

**Chlamys biddleana** (Kellum)**Pectinidae**

*Pecten biddleana* Kellum, 1926, p. 20, pl. 2, fig. 4; Harbison, 1944, p. 3, pl. 1, fig. 5

*Chlamys (Chlamys) biddleana* (Kellum), Tucker-Rowland, 1936b, p. 1002, pl. 9, fig. 2

*Range*.—Middle Eocene. Santee ls., upper Claiborne gr. Upper Eocene. Castle Hayne ls. (type), Jackson gr.

*Localities*.—S. C.: *Berkeley Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner. N. C.: *Jones Co.*, Pollokville; *Craven Co.*, Biddle Ldg., Neuse R. (type)

*Type*.—Holotype, No. 353236 USNM

### **Chlamys burlesonensis (Harris)**

### **Pectinidae**

*Pecten Deshayesii* Lea, Heilprin, 1891a, p. 403; Kennedy, 1895, pp. 114, 118, 131. Not Lea 1833, p. 87 *fide* Harris, 1919

*Pecten (Chlamys) clarkeanus* Aldrich, Dall, 1898b, p. 739 in part

*Pecten (clarkeanus ? var.) burlesonensis* Harris, 1919, p. 26, pl. 14, figs. 11-13; Brann and Kent, 1960, p. 659

*Pecten burlesonensis* Harris, Renick and Stenzel, 1931, pp. 87, 108, pl. 6, figs. 1, 2

*Chlamys (Chlamys) clarkeanus* (Aldrich), Tucker-Rowland, 1936b, p. 990 in part

*Chlamys burlesonensis* (Harris), Gardner, 1945, p. 64 in part

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr., Stenzel, 1939, p. 807

*Localities*.—TEXAS: NE. *Burleson Co.*, Burleson Shell Bluff, Brazos R. (type), (Collier's Ferry or Black Bluff shoals); *Bastrop Co.*, Smithville, Colorado R.

*Types*.—Syntypes, Harris, pl. 14, fig. 11 USNM; Harris, pl. 14, fig. 13 lost; Harris, pl. 14, fig. 12 PRI lost prior to 1937

### **Chlamys cainei (Harris)**

### **Pectinidae**

*Pecten willcoxi cainei* Harris, 1919, p. 24, pl. 14, fig. 8

*Chlamys (Chlamys) cainei* (Harris), Tucker-Rowland, 1936b, p. 987 as *caini*, pl. 5, fig. 11 holotype

*Pecten wautubbeanus cainei* Harris, Brann and Kent, 1960, p. 672

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: *Clarke Co.*, Wautubbee (type); *Newton Co.*, Hickory

*Type*.—Holotype, No. 438 PRI

### **Chlamys cawcawensis (Harris)**

### **Pectinidae**

*Pecten cawcawensis* Harris, 1919, p. 27, pl. 15 not 16 as in text figs. 1-7; Brann and Kent, 1960, p. 658

*Chlamys (Chlamys) cacawensis [sic]* (Harris), Tucker-Rowland, 1936b, p. 996, pl. 5, figs. 12-14 syntypes, fig. 15

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.; Cook Mt. fm., upper Claiborne gr.

*Localities*.—S.C.: *Orangeburg Co.*, near Cawcaw Swamp, Columbia Rd., 17 mi. N. of Orangeburg (type). N. C.: *Craven Co.*, above New Bern, Neuse R. GA.: *Sumter or Dooly Co.*, USNM cat. loc. 5205 Flint R., old Danville Ferry, 16 ½ mi. E. of Americus. ALA.: *Monroe Co.*, Claiborne ?

*Types*.—Syntypes, Nos. 441-447 PRI

**Chlamys choctavensis (Aldrich)****Pectinidae**

*Pecten choctavensis* Aldrich, 1895b, p. 16, pl. 5, fig. 7

*Chlamys choctavensis* (Aldrich), Harris, 1897b, p. 46, pl. 7, fig. 6; Brann and Kent, 1960, p. 208

*Pecten (Aequipekten ?) choctavensis* Aldrich, Dall, 1898b, p. 733

*Pecten choctavensis* Aldrich, Clark and Martin, 1901, p. 188 in part, pl. 44, figs. 4-6

*Aequipekten choctavensis* (Aldrich), Teppner, 1922, p. 148

*Pecten (Chlamys) choctavensis* Aldrich, Shimer and Shrock, 1944, p. 407, pl. 161, figs. 17, 18 copy Clark and Martin

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.; Nanjemoy fm. (Clark and Martin)

*Localities*.—ALA.: Clarke Co., Choctaw Corner (type); Woods Bluff, Tombigbee R. MD.: Charles Co., Popes Cr.; 1 ½ mi. above Popes Cr.; Prince Georges Co. (Clark and Martin)

*Type*.—Holotype, No. 638957 USNM

**Chlamys clarkeana (Aldrich)****Pectinidae**

*Pecten clarkeanus* Aldrich, 1895b, p. 16, pl. 5, fig. 11; Harris, 1919, p. 25 in part, pl. 15, figs. 8, 9, 13; Brann and Kent, 1960, p. 659, No. 451 (only); Nos. 448-450=*Eburneopecten hamiltonensis* (Tucker)

*Pecten (Chlamys) clarkeanus* Aldrich, Dall, 1898b, p. 739 in part

*Chlamys clarkeana* (Aldrich), Teppner, 1922, p. 104 not Harris as in reference

*Chlamys (Chlamys) clarkeanus* (Aldrich), Tucker-Rowland, 1936b, p. 990 in part, pl. 5, fig. 1; pl. 7, fig. 6; pl. 10, figs. 5, 12

*Range*.—Middle Eocene. Cook Mt. fm. (type), middle Claiborne gr.

*Localities*.—ALA.: Choctaw Co., Sowilpa Cr. (type) [Souwilpa Cr.]; Monroe Co., Hamilton Bluff, Alabama R.; Lisbon Bluff, Alabama R.

*Type*.—Holotype, No. 638958 USNM

*Chlamys (Chlamys) clarkeanus* (Aldrich)

See *Chlamys burlesonensis* (Harris)

See also *Chlamys clarkeana* (Aldrich)

**Chlamys cocoana Dall****Pectinidae**

*Pecten (Chlamys) cocoanus* Dall, 1898b, p. 738, pl. 34, fig. 23; Schuchert, et al., 1905, p. 486

*Chlamys cocoana* Dall, Teppner, 1922, p. 104 not Eocene as indicated

*Chlamys (Chlamys) cocoanus* Dall, Tucker-Rowland, 1936b, p. 1001, pl. 7, figs. 7, 8 paragraph "Specimens . . . *Lyropecten*" should be under *C. anatis*

*Pecten (Chlamys) cocoanus* Dall, Harris and Palmer, 1946, p. 32, pl. 8, fig. 10 copy Dall

*Range*.—Oligocene. Red Bluff horizon. See Cooke and MacNeil, 1952, p. 27

*Localities*.—ALA.: Choctaw Co., Cocoa P. O. (type). MISS.: Wayne Co., Red Bluff [Hiwanee Station], Chickasawhay R.

*Type*.—Holotype, No. 141025 USNM

**Chlamys cookei (Kellum)****Pectinidae**

*Pecten cookei* Kellum, 1926, p. 20, pl. 2, figs. 2-3; Richards, 1950, p. 18

*Chlamys (Chlamys) cookei* (Kellum), Tucker-Rowland, 1936b, p. 1000, pl. 7, fig. 5; pl. 9, fig. 5



*Range*.—Upper Eocene. Castle Hayne ls. (type), Jackson gr.  
*Localities*.—N.C.: *Duplin Co.*, 3 ["2"] miles S. of Magnolia (type); 2 mi. S. of Kornegay; *Pitt Co.*, 3 mi. E. of Quinerly; *Wayne Co.*, Broadhurst Bridge. For additional localities see Kellum, 1926, Tucker-Rowland, 1936  
*Type*.—Holotype, No. 353235 USNM

***Chlamys corvina* Harris****Pectinidae**

*Pecten (Chlamys) corvinus* Harris in Harris and Palmer, 1946, p. 31, pl. 8, fig. 6; Brann and Kent, 1960, p. 661

*Range*.—Upper Eocene. Cf. Upper Jackson gr. (type)  
*Locality*.—ARK.: *St. Francis Co.*, Crow Cr. near Forrest City (type)  
*Type*.—Holotype, No. 4171 PRI

***Chlamys cushmani* (Kellum)****Pectinidae**

*Pecten cushmani* Kellum, 1926, p. 20, pl. 2, fig. 1

*Chlamys (Chlamys) cushmani* (Kellum), Tucker-Rowland, 1936b, p. 999, pl. 9, fig. 1 holotype

*Range*.—Upper Eocene. Castle Hayne ls. (type) Jackson gr.  
*Localities*.—N.C.: *Pitt or Craven Co.* [station located at boundary], 3 mi. E. of Quinerly (type); *Pitt Co.*, Quinerly Bridge; *Pender Co.*, 3 mi. NE. of Maple Hill  
*Type*.—Holotype, No. 353314 USNM

***Chlamys danvillensis* Weisbord in Tucker-Rowland****Pectinidae**

*Pecten (Chlamys) danvillensis* Weisbord ms.

*Chlamys (Chlamys) danvillensis* Weisbord, Tucker-Rowland, 1936b, p. 999, pl. 6, figs. 4, 6, 12

*Pecten (Chlamys) danvillensis* Weisbord, Harris and Palmer, 1946, p. 31, pl. 8, figs. 7-9; Brann and Kent, 1960, p. 661

*Range*.—Upper Eocene. Danville Ldg. beds (type), uppermost Jackson gr.

*Localities*.—LA.: *Catahoula Par.*, Danville Ldg., Ouachita R. (type); *Winn Par.*, Tullus

*Type*.—Syntype (1), No. 4173 PRI (other "not returned")

***Chlamys deshayesii* (Lea)****Pectinidae**

*Pecten Deshayesii* Lea, 1833, p. 87, pl. 3, fig. 66 *Deshaysii* [sic]; Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 393; Conrad, 1865a, p. 14; Conrad, 1866a, p. 3; Heilprin, 1882a, p. 417; Heilprin, 1884b, p. 86; de Gregorio, 1890, pp. 180, 181, pl. 21, fig. 12 copy *lyelli*, fig. 13 copy *deshayesii*, fig. 14; Harris, 1895b, p. 16; Harris, 1919, p. 19, pl. 13, figs. 2-7 [as *deshaysii*]; Brann and Kent, 1960, p. 662. Not *P. deshaysii* Nyst, 1836, p. 15; Nyst, 1845, p. 288

*Pecten Lyelli* Lea 1833, p. 88, pl. 3, fig. 67; Conrad, App. in Morton, 1834, p. 6 = *P. Deshayesii* Lea; H. C. Lea, 1849, p. 103; de Gregorio, 1890, p. 180; Harris, 1895b, p. 26; Harris, 1919, pp. 19-21

? *Pecten minutus* Lea, 1833, p. 88 *nomen nudum*

*Pecten Deshayesii tirmus* de Gregorio, 1890, p. 181, pl. 21, fig. 15; Harris, 1919, p. 21 not p. 23

*Chlamys Deshayesii* (Lea), Cossmann, 1893, p. 18; Dall, 1898b, p. 737 in part; Richards, 1950, p. 18, in part

*Aequipecten Deshayesii* (Lea), Teppner, 1922, p. 151

? *Pecten* (*Chlamys*) *deshayesii* Lea, Kellum, 1926, p. 19

*Chlamys* (*Chlamys*) *deshayesi* [sic] *tirmus* (de Gregorio), Tucker-Rowland, 1936b, p. 995 in part, not pl. 10, fig. 10

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Holotype, No. 5425 ANSP. Holotype, *P. lyelli*, No. 5426 ANSP

***Chlamys deshayesii dennisoni* Tucker [Rowland]**

**Pectinidae**

*Pecten deshayesii* Lea "var." Harris, 1919, p. 19, pl. 13, fig. 1; Brann and Kent, 1960, p. 662

*Chlamys* (*Chlamys*) *deshayesi* [sic] *dennisoni* Tucker [Rowland], 1934, p. 613, pl. 26, fig. 1 holotype; Tucker-Rowland, 1936b, p. 995, pl. 5, fig. 6 holotype; Brann and Kent, 1960, p. 209 as *deshayesii*

*Range*.—Upper Eocene. *Scutella* bed (type), lower Jackson gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff "*Scutella*" layer just above the "sand" (type)

*Type*.—Holotype, No. 426 PRI

***Chlamys dysoni* Tucker-Rowland**

**Pectinidae**

*Chlamys* (*Lyropecten*) *dysoni* Tucker-Rowland, 1938, p. 5, pl. 4, fig. 9

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr. (type)

*Locality*.—FLA.: Marion Co., "near Ocala" (type)

*Type*.—Holotype. Presumably CNHM

***Chlamys greggi* Harris**

**Pectinidae**

? *Pecten Deshayesii* Lea, Aldrich, 1886, p. 57; not *P. Deshayesii* Lea, 1833, p. 87

*Chlamys greggi* Harris, 1897b, p. 45, pl. 7, figs. 4, 5; Teppner, 1922, p. 107; Brann and Kent, 1960, p. 209

*Pecten* (*Chlamys*) *greggi* Harris, Dall, 1898b, p. 738; Shimer and Shrock, 1944, p. 407

*Chlamys* (*Chlamys*) *greggi* Harris, Tucker-Rowland, 1936b, p. 987, pl. 6, fig. 10; pl. 10, fig. 4

*Range*.—Lower Eocene, Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.; Bells Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.

*Localities*.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type), Bells Ldg., Alabama R.; Wilcox Co., Yellow Bluff, Alabama R.; Lower Peach Tree Ldg., Alabama R. GA.: Clay Co., Fort Gaines

*Types*.—Syntypes, Nos. 188, 189 PRI

***Chlamys incertae* Tucker-Rowland**

**Pectinidae**

*Chlamys* (*Lyropecten*) *incertae* Tucker-Rowland, 1938, p. 6, pl. 5, fig. 3

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr. (type)

*Locality*.—FLA.: Marion Co., "near Ocala" (type)

*Type*.—? Holotype, No. UC 51872 CNHM

***Chlamys indecisa* Dall**

**Pectinidae**

*Pecten* (*Chlamys*) *indecisus* Dall, 1898b, p. 744, pl. 34, fig. 3; Schuchert, et al., 1905, p. 488 wrong locality

*Pecten indecisis* Dall, Cooke, 1916, p. 110

*Chlamys indecisa* Dall, Teppner, 1922, p. 110 not Oligocene as indicated

*Chlamys (Chlamys) indecisis* Dall, Tucker [Rowland], 1936b, p. 1002, pl. 6, figs. 1, 3, 2 holotype.

*Range*.—Upper Eocene. "Ocala ls." (type), Ocala gr.

*Localities*.—FLA.: *Alachua Co.*, Archer (type); *Marion Co.*, Martin Station (Dall).

Not remainder of localities of Dall nor "Caloosahatchee R., Fort Thompson Florida" as in Schuchert, *et al.*, 1905.

*Type*.—Holotype, No. 107754 USNM labelled

### ***Chlamys johnsoni* (Clark)**

### **Pectinidae**

*Pecten johnsoni* Clark, 1895, p. 5; Clark, 1896, p. 85, pl. 34, figs. 3a, b; Dall, 1898b, pp. 736, 737; Clark and Martin, 1901, p. 189, pl. 44, figs. 8, 8a holotype

*Chlamys (Chlamys) johnsoni* (Clark), Tucker-Rowland, 1936b, p. 989, pl. 10, fig. 1 holotype

*Pecten (Chlamys) johnsoni* Clark, Shimer and Shrock, 1944, p. 407

*Range*.—Paleocene. Aquia fm. (type). Lower Eocene. Nanjemoy fm. (Clark and Martin)

*Localities*.—VA.: *Stafford Co.*, Potomac Cr. (type); *King George Co.*, 2 mi. below Potomac Cr.; Woodstock; mouth of Paspotansa Cr. (Clark and Martin)

*Types*.—Syntypes, USNM

### ***Chlamys kneiskerni* (Conrad)**

### **Pectinidae**

*Pecten Kneiskerni* Conrad, 1869b, p. 40, pl. 1, fig. 18; Heilprin, 1882a, p. 417; Whitfield, 1885, p. 224 in part, not pl. 29, fig. 3 not "type", not 4, 5; Whitfield, 1899, p. 163

*Pecten (Chlamys) Kneiskerni* Conrad, Dall, 1898b, p. 735 in part

*Chlamys Kneiskerni* (Conrad), Teppner, 1922, p. 112 not Oligocene as indicated

*Chlamys (Chlamys) kneiskerni* (Conrad), Tucker-Rowland, 1936b, p. 996, pl. 10, fig. 9 holotype

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N. J.: *Monmouth Co.*, Shark R. (type)

*Type*.—Holotype, Rutgers Univ. 1899 not 1962 *vide* Rutgers

### ***Chlamys membranosa* (Morton)**

### **Pectinidae**

*Pecten membranosus* Morton, 1833b, p. 130, pl. 10, fig. 4; Morton, 1834, p. 59, pl. 10, fig. 4 external; Conrad, 1842b, p. 174; Hodge, 1843, p. 97; Gibbs, 1845, p. 254; d'Orbigny, 1850, p. 253; Conrad, 1865a, p. 14; Conrad, 1866a, p. 23; Heilprin, 1881a, p. 158; Heilprin, 1882a, 417; Meyer, 1885b, p. 68; de Gregorio, 1890, p. 183

*Pecten Carolinensis* Conrad, App. in Kerr, 1875, p. 18, pl. 3, fig. 2 not *Liropecten [sic] Carolinensis* Conrad, App. in Kerr, 1875, p. 18 Miocene

*Pecten (Chlamys) membranosus* Morton, Dall, 1898b, p. 736

*Chlamys membranosa* (Morton), Teppner, 1922, p. 114

Cf. *Pecten (Chlamys) membranosus* Morton, Kellum, 1926, p. 19; Harbison, 1944, p. 3, pl. 1, fig. 7

*Chlamys (Chlamys) membranosus* (Morton), Tucker-Rowland, 1936b, p. 998, pl. 9, figs. 7, 8; pl. 10, fig. 11 holotype internal

Cf. *Pecten membranosus* Morton, Richards, 1948, p. 4, pl. 1, fig. 4; Richards, 1950, p. 15, fig. 63d

*Range*.—Upper Eocene. Castle Hayne ls. (type), Jackson gr.

*Localities*.—S. C.: "calcareous strata of South Carolina" (type).

See Harbison. Cf. N.C.: *Jones Co.*, 2 ½ mi. W. of Dover; *New Hanover Co.*, 3 ½ mi. NW. of Wrightsboro; Wilmington; *Harnett Co.*, 4 mi. NE. of Spout Springs; *Pender Co.*, Old Rocky Point quarry; Castle Hayne quarry; Northeast Cape Fear R., 3 ½ mi. above Castle Hayne Bridge; 3 mi. NE. of Rose Hill. For further localities see Kellum, 1926, Richards, 1948, 1950

*Type*.—Holotype, No. 12574 ANSP

### ***Chlamys nupera* (Conrad)**

### **Pectinidae**

*Pecten nuperus* Conrad in Wailes 1854, p. 289, pl. 14, fig. 11 [*as nuperum*] (reprint, 1939, p. 19, pl. 1, fig. 11); Conrad, 1856a, p. 259 (reprint 1939, p. 5); Conrad, 1865a, p. 14; Conrad, 1866a, p. 23; Hopkins, 1871, p. 12; Heilprin, 1882a, p. 417; Meyer, 1885a, p. 459 not "Heilprin, Acad. Nat. Sci." as in Tucker-Rowland, 1936b, p. 1000; Meyer, 1885c, p. 425; Langdon, 1886, p. 202; Vaughan, 1896, p. 50

*Pecten (Chlamys) nuperus* Conrad, Dall, 1898b, p. 739; Harris and Palmer, 1946, p. 29, pl. 7, figs. 1-4; Brann and Kent, 1960, p. 666

*Chlamys nupera* (Conrad), Teppner, 1922, p. 119; Brann and Kent, 1960, p. 211

*Chlamys (Chlamys) nuperus* (Conrad), Tucker-Rowland, 1936b, p. 1000, pl. 10, fig. 6

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type). LA.: *Grant Par.*, Montgomery, Red R. GA.: *Decatur Co.*, Russell Springs. FLA.: *Alachua Co.*, Arredondo

*Type*.—Holotype, No. 13185 ANSP Moore, 1962, p. 80

### ***Chlamys perplana* of authors [*Pecten perplanus*]**

### **Pectinidae**

Not *Pecten perplanus* Morton, 1833a, p. 293, pl. 5, fig. 5; Morton, 1834, p. 58, pl. 5, fig. 5; pl. 15, fig. 8

Not *Pecten Spillmani* Gabb, 1860d, p. 402, pl. 68, fig. 3; Conrad, 1865a, p. 14

Not *Pecten (Aequipecten) perplanus* Morton, Dall, 1898b, p. 732 in part; Tucker-Rowland, 1938, p. 29, pl. 6, fig. 12 as *Chlamys*

Not *Pecten perplanus* Morton, Hopkins, 1917, p. 296, pl. 27, figs. 4, 4a; Cooke, 1926a, pl. 96, fig. 5

See Harris in Harris and Palmer, 1946, pp. 27, 28

From Eocene and Oligocene localities of numerous authors.

*Chlamys (Aequipecten) perplanus* (Morton), Tucker-Rowland, 1938  
See *Chlamys spillmani* (Gabb)

*Chlamys (Aequipecten) perplanus centrotus* (Dall)  
See *Aequipecten perplanus centrotus* (Dall)

### ***Chlamys pulchricosta* (Meyer and Aldrich)**

### **Pectinidae**

*Pecten pulchricosta* Meyer and Aldrich, 1886, p. 45, pl. 2, figs. 23, 23a; Harris, 1919, p. 24, pl. 14, figs. 9, 10; Brann and Kent, 1960, pp. 667, 668



*Pecten (Nodipecten) pulchricosta* Meyer and Aldrich, Dall, 1898b, p. 730

*Aequipecten (Nodipecten) pulchricostus* (Meyer and Aldrich), Tappner, 1922, p. 205

*Chlamys (Lyropecten) pulchricostata* [sic] "Aldrich and Meyer" [sic] [Meyer and Aldrich], Tucker-Rowland, 1938, p. 6, pl. 4, fig. 11 holotype, pl. 6, fig. 2

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: Clarke Co., Wautubbee (type)

*Type*.—Holotype, No. 638745 USNM

#### **Chlamys rigbyi** (Whitfield)

#### **Pectinidae**

*Pecten Rigbyi* Whitfield, 1885, p. 226, pl. 29, fig. 6; Dall, 1898b, p. 736; Whitfield, 1899, p. 163

*Chlamys (Chlamys) rigbyi* (Whitfield), Tucker-Rowland, 1936b, p. 986, pl. 10, fig. 7 holotype

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N.J.: Monmouth Co., "upper layer of Upper Marls, Shark R." (type)

*Type*.—Holotype, No. 9716 AMNH. Not found 1962

*Chlamys scintillatus* (Conrad)

See *Eburneopecten scintillatus* (Conrad)

#### **Chlamys seabeensis** (Richards)

#### **Pectinidae**

*Pecten seabeensis* Richards, 1947, p. 34, pl. 12, fig. 18

*Range*.—Eocene. "Pamunkey" (type)=Paleocene or lower Eocene.

*Locality*.—VA.: York Co., Camp Peary, depth 380 ft., (Seabee Base) (type)

*Type*.—Holotype, No. 16781 ANSP

#### **Chlamys sheldoniae** Tucker

#### **Pectinidae**

*Chlamys (Chlamys) sheldoniae* Tucker, 1934, p. 614, pl. 27, fig. 2; Tucker-Rowland, 1936b, p. 988, pl. 6, figs. 5, 8 holotype

*Range*.—Paleocene. Aquia fm. (type)

*Locality*.—MD.: Prince Georges Co., Fort Washington (type)

*Type*.—Holotype, probably CNHM [not PRI]

#### **Chlamys spillmani** (Gabb)

#### **Pectinidae**

*Pecten spillmani* Gabb, 1860d, p. 402, pl. 68, fig. 3; Conrad, 1865a, p. 14; Conrad, 1866a, p. 3; de Gregorio, 1890, p. 182

*Pecten perplanus* Morton, Heilprin, 1882a, p. 417; Cooke, 1926a, pl. 96 fig. 5; Semmes, 1929, p. 272, fig. 62-5

*Pecten (Aequipecten) perplanus* Morton, Dall, 1898b, p. 732; Shimer and Shrock, 1944, p. 407

*Chlamys (Aequipecten) perplanus* (Morton), Tucker-Rowland, 1938, p. 29, pl. 6, fig. 12

*Pecten (Chlamys) spillmani* Gabb, Harris and Palmer, 1946, p. 27, pl. 6, figs. 3-8; Brann and Kent, 1960, p. 671

Cf. *Chlamys spillmani* (Gabb), Harris, 1951, p. 9 in part, pl. 5, figs. 1, 1'; Brann and Kent, 1960, p. 211



*Range*.—Eocene. Upper Jackson gr.

*Localities*.—MISS.: Clarke Co., Shubuta. ALA.: (type). FLA.: Marion Co., E. of Kendrick; 6 mi. SW. of Ocala; Dixie Lime Products Co., Reddick. GA.: Houston Co., 2.9 mi. S. of Perry, Plant 2, Clinchfield Quarry; Georgia Lime Rock Quarry about 4 mi. from Perry (Harris)

*Type*.—Holotype, ANSP

***Chlamys spillmani* (Gabb) "vars."**

**Pectinidae**

*Chlamys spillmani* (Gabb) "vars." Harris, 1951, p. 9, pl. 4, figs. 1-3; Brann and Kent, 1960, p. 211

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Localities*.—FLA.: Marion Co., Florida Lime Products Co., about 6 mi. SW. of Ocala. GA.: Houston Co., Georgia Lime Rock quarry about 4 mi. from Perry

*Types*.—Figured specimens, Nos. 24447-24449 PRI

***Chlamys spillmani clinchfieldensis* Harris**

**Pectinidae**

*Chlamys spillmani clinchfieldensis* Harris, 1951, p. 10, pl. 4, figs. 4-7; Brann and Kent, 1960, pp. 211, 212

*Range*.—Upper Eocene. "Ocala ls.", (type), Ocala gr.

*Locality*.—GA.: Houston Co., Pennsylvania Cement Corp., plant 2, Clinchfield quarry (type)

*Types*.—Holotype, No. 24450; paratype, No. 24451 PRI

***Chlamys trentensis* (Harris)**

**Pectinidae**

*Pecten trentensis* Harris in Van Winkle and Harris, 1919, p. 15, pl. 2, figs. 8, 9; Kellum, 1926, p. 35; Richards, 1943, p. 519, pl. 34, figs. 12, 25; Brann and Kent, 1960, p. 671

*Chlamys (Chlamys) trentensis* (Harris), Tucker-Rowland, 1936b, p. 1005, pl. 10, fig. 8; Brann and Kent, 1960, p. 212

*Range*.—Post-Eocene

*Locality*.—N. C.: Jones Co., rt. bank Trent R., 6 mi. below Pollocksville ["Polloksville"] (type)

*Types*.—Syntypes, Nos. 1407, 1408 PRI

***Chlamys wahtubbeana* Dall**

**Pectinidae**

*Pecten (Chlamys) wahtubbeanus* Dall, 1898b, p. 736, pl. 34, fig. 9; Schuchert, et al., 1905, p. 491

*Pecten wahtubbeanus* Dall, Harris, 1919, p. 21, pl. 14, figs. 1-4; Brann and Kent, 1960, p. 672

*Pecten wahtubbeanus tirmus* de Gregorio, Harris, 1919, p. 23, (not p. 21), pl. 14, fig. 5 as var. base of Claiborne Bluff; Brann and Kent, 1960, p. 672 as var.

*Chlamys wahtubbeana* Dall, Teppner, 1922, p. 129

*Chlamys (Chlamys) wahtubbeanus* Dall, Tucker-Rowland, 1936b, p. 992, pl. 5, figs. 7-9; pl. 9, fig. 4 holotype

*Chlamys (Chlamys) dehayesi* [sic] *tirmus* (de Gregorio), Tucker-Rowland, 1936b, p. 995 in part, pl. 10, fig. 10, same specimen as Harris, 1919, base of Claiborne Bluff

*Pecten (Chlamys) wahtubbeanus* Dall, Shimer and Shrock, 1944, p. 407

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: *Clarke Co.*, Wautubbee; *Newton Co.*, Hickory; 8 mi. W. of Enterprise; Indian Mound R.R. cut (type) *fide* Schuchert, *et al.*, 1905, p. 491. ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R.; *Clarke Co.*, Coffeeville. LA.: *Winn Par.*, St. Maurice; *Sabine Par.*, Simpkins place, 3 mi. SE. of Negreet

*Type*.—Holotype, No. 137612 USNM

***Chlamys wautubbeana willcoxi* (Dall)**

**Pectinidae**

*Pecten* (*wautubbeanus* var. ?) *Willcoxi* Dall, 1898b, p. 737, pl. 29, fig. 4 as *Pecten Willcoxi*; Schuchert, *et al.*, 1905, p. 491

*Pecten* (*wautubbeanus* var. ?) *willcoxi* Dall, Harris, 1919, p. 23, pl. 14, figs. 6, 7

*Chlamys Willcoxi* (Dall), Teppner, 1922, p. 130

*Chlamys* (*Chlamys*) *wautubbeanus willcoxi* (Dall), Tucker-Rowland, 1936b, p. 993, pl. 5, fig. 10; pl. 10, fig. 2 holotype

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: "Eocene of Clarke Co. . . and of the Wautubbee hills (Claibornian); Johnson and Burns"—Dall; *Clarke Co.*, McLeod's mill (type) *fide* Schuchert, *et al.*, 1905, p. 491

*Type*.—Holotype, No. 140126 USNM

***Chlamys* sp.**

**Pectinidae**

*Pecten* sp. Harris, 1919, p. 20, pl. 13, fig. 8; Brann and Kent, 1960, p. 670

*Range*.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R.

*Type*.—Figured specimen, No. 433 PRI

***Chlamys* sp.**

**Pectinidae**

*Pecten* sp. Clark, 1895, p. 5; Clark, 1896, p. 86, pl. 34, fig. 4; Clark and Martin, 1901, p. 190, pl. 44, figs. 9, 9a

*Range*.—Paleocene. Aquia fm.

*Locality*.—VA.: *Stafford Co.*, Potomac Cr.

*Type*.—Figured specimen, USNM

***Chlamys* sp.**

**Pectinidae**

*Chlamys* sp. Harris, 1951, pl. 4, figs. 8, 9; Brann and Kent, 1960, p. 211

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—FLA.: *Alachua Co.*, Ocala Lime Rock Corp., 3.5 mi. SE. of Newberry, about 17 mi. W. of Gainesville

*Type*.—Figured specimen, No. 24452 PRI

*Cibota mississippiensis* (Conrad)

See *Barbatia* (*Barbatia*) *uxorispalmeri* Stenzel and Krause

*Claibornites rotundus* (Lea)

See *Epilucina rotunda* (Lea)

*Clementia mercenaroidea* (Aldrich)

See ? *Mercimonia mercenaroidea* (Aldrich)

*Coralliophaga bryani* Clark

See *Oryctomya bryani* (Clark)

*Coralliophaga (Oryctomya) claibornensis* Dall  
See *Oryctomya claibornensis* Dall

*Coralliophaga prima* Harris  
See cf. *Oryctomya prima* (Harris)

**Corbicula ? cornelliana** Harris

**Corbiculidae**

*Corbicula ? cornelliana* Harris, 1897b, p. 65, pl. 13, fig. 3; Dall, 1903a, p. 1451; Henderson, 1935, pp. 10, 38, 113; Brann and Kent, 1960, p. 252

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: NE. Washington Co., Hatchetigbee Bluff, Tombigbee R. (type)

*Type*.—Holotype, No. 171 PRI

**Corbicula texana** Gardner

**Corbiculidae**

*Corbicula texana* Gardner, 1935, p. 154, pl. 8, figs. 6, 7

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: Uvalde Co., Schuddemagen ranch, 11 mi. S. of Sabinal, a few hundred yds. S. of junc. of Elm Cr. with Sabinal Cr., USGS Sta. 6279 (type); Medina Co., D'Hanis-Yancey rd. about 7½ mi. E. of S. of D'Hanis

*Type*.—Holotype, No. 370930, USNM

*Corbis claibornensis* Dall

See *Corbis lirata* (Conrad)

*Corbis distans* Conrad

See *Corbis undata* Conrad

*Corbis lamellosa* Lamarck, Conrad, 1833c. Not Lamarck, 1818

See *Corbis lirata* (Conrad)

**Corbis lirata** (Conrad)

**Fimbridiidae**

*Corbis lamellosa* Lamarck, Conrad, 1833c, p. 41 (Harris reprint, 1893, p. 67, pl. 19, fig. 5); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 401, pl. 4, fig. 16; H. C. Lea, 1849, p. 98; Tuomey, 1858, p. 265; Harris, 1895b, p. 25 = *Gafrarium liratum* Conrad. Not *C. lamellosa* Lamarck, 1818, p. 537, not p. 587 as in Conrad

*Gafrarium liratum* Conrad, 1865a, p. 9 new name for *Corbis lamellosa* Conrad, 1833c, p. 41, not *C. lamellosa* Lamarck; Conrad, 1866a, p. 6; Harris, 1895b, p. 25. Not *Lucina lirata* Phillips, 1829, p. 140 name and figure only. Not *Lucina lyrata* Phil. in D'Archiac, 1843, p. 372

*Corbis (Gafrarium) lirata* Conrad, Heilprin, 1884b, p. 87

*Corbis lirata* (Conrad), de Gregorio, 1890, p. 209, pl. 30, fig. 13 copy Conrad

*Corbis claibornensis* Dall, 1903a, p. 1393 new name for *Corbis lirata* Conrad [not necessary]; Harris, 1919, p. 123, pl. 40, figs. 3, 4, 4a; Brann and Kent, 1960, p. 253

*Fimbria claibornensis* (Dall), Richards and Palmer, 1953, p. 50

The new name of *C. claibornensis* was given by Dall because he thought the name *Corbis lirata* Conrad was preoccupied by a "*Corbis lirata* d'Archiac". The species was *Lucina lirata* Phillips in D'Archiac. Hence the new name was not necessary.

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Unknown. Not listed in Moore, 1962

### **Corbis undata Conrad**

### **Fimbriidea**

*Corbis undata* Conrad, 1833c, p. 41, (Harris reprint, 1893, p. 67, pl. 19, fig. 6); Conrad, App. in Morton, 1834, p. 7 as *C. undulata*; Conrad, 1846c, p. 401, pl. 4, fig. 11; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 387; Harris, 1895b, p. 47; Dall, 1903a, p. 1392; Harris, 1919, p. 124, pl. 40, fig. 5; Brann and Kent, 1960, p. 253

*Corbis distans* Conrad, 1833c, p. 41, (Harris reprint, 1893, p. 67); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 401 (=young *C. undata*); H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 387; de Gregorio, 1890, p. 209, pl. 30, fig. 10 copy Conrad; Cossmann, 1893, p. 11; Harris, 1895b, p. 16 (= *C. undata* Conrad)

*Gafrarium distans* (Conrad), Conrad, 1865a, p. 9; Conrad, 1866a, p. 6

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Missing ANSP Moore, 1962, p. 106; *Corbis distans* Conrad probable syntypes (3), Nos. 30505, 30506 ANSP Moore, 1962, p. 55

*Corbis undulata* Conrad, App. in Morton, 1834, p. 7 *nomen nudum*, probably error for *C. undata* Conrad, which see

*Corbula Alabamensis* Owen

See *Caryocorbula willistoni* (Meyer)

*Corbula Alabamiensis* Lea

See *Caryocorbula alabamiensis* (Lea)

*Corbula alabamiensis* Lea, Price and Palmer, 1928; Renick and Stenzel, 1931. Not Lea, 1833

See *Caryocorbula deussenii* (Gardner)

*Corbula alabamiensis* Lea "var." Harris, 1897b

See *Corbula subengonata* Dall

*Corbula alabamiensis* Lea "var." Vaughan, 1896; Harris, 1919

See *Caryocorbula deussenii* (Gardner)

*Corbula alabamiensis citronella* Harris

See *Caryocorbula alabamiensis citronella* (Harris)

*Corbula alabamiensis ? gregorioi* Cossmann

See *Caryocorbula alabamiensis gregorioi* (Cossmann)

*Corbula alabamiensis* var. *ima* de Gregorio

See *Caryocorbula alabamiensis* variation "*ima*" de Gregorio

*Corbula alabamiensis* var. *tecla* de Gregorio

See *Caryocorbula alabamiensis* variation "*tecla*" de Gregorio

*Corbula aldrichi* Meyer

See *Vokesula aldrichi* (Meyer)

*Corbula aldrichi smithvillensis* Harris

See *Vokesula smithvillensis smithvillensis* (Harris)

**Corbula aliformis** Conrad**Corbulidae**

*Corbula alta* Conrad, 1850, p. 41 expl. of pl. only, pl. 1, fig. 3. Not  
*C. alta* Conrad, 1848b, p. 124, pl. 12, figs. 33-35, Vicksburg  
*Corbula aliformis* Conrad, 1866a, p. 20 not "Miss."; Conrad, 1866b,  
 p. 76

*Range*.—Eocene. "Shell Bluff gr."

*Locality*.—"GA." Coll. J. Hamilton Couper, Conrad, 1850, p. 39

*Type*.—Missing, Moore, 1962, p. 35

*Corbula alta* Conrad, 1850 not Conrad, 1848b

See *Corbula aliformis* Conrad

*Corbula (Nearea) alternata* Aldrich

See *Cuspidaria attenuata* (Aldrich)

**Corbula ? (Tiza) amara** de Gregorio**Corbulidae**

*Corbula ? (Tiza) amara* de Gregorio, 1890, p. 234, pl. 37, figs. 12-14,  
 age doubtful not Claiborne, Ala.; Harris, 1919, p. 200 based on  
*Corbula alta* Conrad, Vicksburg Oligocene  
 A doubtful Gosport sd. species.

*Type*.—Formerly De Gregorio Coll. Univ. Palermo, Palermo,  
 Sicily. Lost

*Corbula (Caryocorbula) augustae* Gardner

See *Caryocorbula augustae* Gardner

*Corbula bicarinata* Conrad

See *Caestocorbula wailesiana* (Harris in Dall)

*Corbula bi-carta* [sic] Hilgard in Hopkins, 1871, p. 11

Misspelling for *C. bicarinata* Conrad

*Corbula (Caryocorbula) cappa* Barry

See *Caryocorbula cappa* Barry

(?) *Corbula (Caryocorbula) carli* Gardner

See *Caryocorbula deussenii* Gardner

*Corbula Churchisonii* [sic] Lea, de Gregorio, 1890, p. 233 under *Cor-*  
*bula gibbosa*, typographical error for *C. murchisonii* Lea

*Corbula clarkeana* Aldrich

See *Physoida clarkeana* (Aldrich)

*Corbula (Caryocorbula) coloradoensis* Gardner

Se *Caryocorbula coloradoensis* Gardner

**Corbula compressa** Lea**Corbulidae**

*Corbula compressa* Lea, 1833, p. 47, in part, pl. 1, fig. 15; H. C. Lea,  
 1849, p. 98; Tuomey, 1858, p. 265; de Gregorio, 1890, p. 233, pl. 36,  
 figs. 34-35 copy Lea, not 33a,b,c, cf. *C. gibbosa* Lea; Cossmann,  
 1893, p. 6; Harris, 1895b, p. 12; Harris, 1919, p. 187, pl. 57, figs.  
 1-6; Brann and Kent, 1960, pp. 258, 259

*Corbula (Neaera) perdubia* de Gregorio, 1890, p. 233, pl. 36, figs. 31,  
 32 fide Harris, 1919

*Corbula perdubia* de Gregorio, Cossmann, 1893, p. 6; Harris, 1919, p.  
 187 as *C. compressa* Lea

*Corbula (Cuneocorbula) compressa* Lea, Dall, 1898b, p. 842 in part



Not *Corbula compressa* d'Orbigny, 1845b, p. 458 *fide* d'Orbigny, 1850, p. 76

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes. Nos. 5067, 5068 ANSP; type *Corbula perdubia* de Gregorio formerly Univ. Palermo, Palermo, Sicily. Lost

*Corbula compressa gregorioi* Cossmann

See *Caryocorbula alabamiensis gregorioi* (Cossmann)

### **Corbula concha** Aldrich

### **Corbulidae**

*Corbula concha* Aldrich, 1895b, p. 19, pl. 5, fig. 6; Harris, 1897b, p. 66, pl. 13, fig. 11; Dall, 1898b, p. 841; Brann and Kent, 1960, p. 259

*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tusahoma fm., middle Wilcox [Sabine] gr.; Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type); Clarke Co., near mouth of Bashi Cr.

*Type*.—Holotype, No. 638969 USNM

### **Corbula conradi** Dall

### **Corbulidae**

*Corbula (Cuneocorbula) conradi* Dall, 1898b, p. 842 for *Corbula nasuta* Conrad in Emory, 1857, p. 161, pl. 19, fig. 4 "Western Texas". Not *Corbula nasuta* G. B. Sowerby I, 1833b, p. 35; nor Conrad, Aug. 1833b, p. 38; nor Conrad, 1846c, p. 398

*Corbula nasuta* Conrad, Schuchert, *et al.*, 1905, p. 169 = *C. conradi* Dall

*Corbula conradi* Dall, Harris, 1919, p. 186

*Corbula (Cuneocorbula) conradi* Dall, Gardner, in Trowbridge, 1923, pp. 95, 96

*Corbula (Caryocorbula) conradi* Dall, Gardner, 1945, p. 133 description of holotype, in part; Stenzel, Krause, and Twining, 1957, p. 168. Not *Corbula conradi* Dall, Lamy, 1941 living, p. 234, nor *C. conradi* Gardner, 1944 Miocene

As Stenzel, Krause, and Twining suggested this name for Conrad's specimen is of no value because the type locality is not definite, and the species is unrecognizable. Probably Gardner's Mexican and Texan shells (1945, p. 133, pl. 9, figs. 13, 16) should be regarded as a distinct form with a new name. See *Caryocorbula* sp. Gardner, 1945.

*Type*.—Holotype, No. 9899 USNM [*C. nasuta* Conrad = *C. conradi* Dall]

*Corbula (Caryocorbula) conradi* Dall, Gardner, 1945 in part

See *Caryocorbula* sp.

See also *Caryocorbula deusseni* (Gardner)

*Corbula densata* Conrad

See *Caryocorbula densata* (Conrad)

*Corbula (Cuneocorbula) deusseni* Gardner

See *Caryocorbula deusseni* (Gardner)

*Corbula engonata* Aldrich, 1886, not Conrad, 1848a

See *Corbula subengonata* Dall

(?) *Corbula* (*Caryocorbula*) sp. cf. *C. (C.) engonata* Conrad, Gardner, 1945

See *Caryocorbula deusseni* Gardner

*Corbula engonatooides* Gardner

See *Caryocorbula engonatooides* (Gardner)

### **Corbula extenuata** Dall

### **Corbulidae**

*Corbula (fossata* var. ?) *extenuata* Dall, 1898b, p. 844; Schuchert, et al., 1905, p. 168

*Corbula (Aloides) extenuata* Dall, Dall, 1900, p. 1192, pl. 36, fig. 6

*Corbula extenuata* Dall, Harris, 1919, p. 194, pl. 58, figs. 21-27; Brann and Kent, 1960, pp. 262, 263

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S. C.: Orangeburg Co., 3-6 mi. WNW. of Orangeburg (type)

*Type*.—Holotype, No. 115843 USNM

*Corbula filosa* Conrad, 1865b, p. 137, not *Corbula filosa* Conrad, 1865c, p. 145 Oligocene

See *Caryocorbula densata* (Conrad)

*Corbula fossata* Meyer and Aldrich

See *Caestocorbula fossata* (Meyer and Aldrich)

*Corbula (fossata* var. ?) *extenuata* Dall, 1898b

See *Corbula extenuata* Dall

*Corbula gibbosa* Lea, Heilprin, 1881; not Lea, 1833

See *Vokesula aldrichi* (Meyer)

*Corbula gibbosa* Lea

See *Parmicorbula gibbosa* (Lea)

*Corbula gregorioi* Cossmann

See *Caryocorbula alabamiensis gregorioi* (Cossmann)

*Corbula (Cuneocorbula) gregorioi* Cossmann, Dall, 1898b, in part.

Not Cossmann, 1893

See *Vokesula smithvillensis smithvillensis* (Harris)

*Corbula ignota* de Gregorio

See *Parmicorbula gibbosa* (Lea)

*Corbula (Caryocorbula) kennedyi* Gardner

See *Caryocorbula kennedyi* Gardner

### **Corbula milium** Dall

### **Corbulidae**

*Corbula (Aloidis) milium* Dall, 1898b, p. 845; Dall, 1900, p. 1192, pl. 36, fig. 19 (figure only); Schuchert, et al., 1905, p. 169; Aldrich, 1921, p. 25 reported common in Sucarnoochee Paleocene.

? *Corbula milium* Dall, Gardner, 1935, p. 189, Paleocene Texas, pl. 19, fig. 4 copy Dall

*Range*.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Thomasville (type)

Aldrich (1921) reported the species "extremely common" in the Paleocene of Alabama, and Gardner (1935) discussed the species from the

Paleocene of Texas. Neither author figured their specimens. The identifications need to be checked.

*Type*.—Holotype, No. 107813 USNM

*Corbula muchisonii* Lea

See cf. *Caestocorbula muchisonii* (Lea)

*Corbula muchisoni fossata* Meyer and Aldrich

See *Caestocorbula fossata* (Meyer and Aldrich)

*Corbula nasuta* Conrad, 1833b; Conrad, 1846c

See *Caryocorbula alabamiensis* (Lea)

*Corblua nasuta* Conrad in Emory, 1857, Schuchert, et al., 1905

See *Corbula conradi* Dall

*Corbula nasuta* Conrad, Harris, 1894b, in part

See *Caryocorbula willistoni* Meyer

See also *C. willistoni arkansia* Harris

*Corbula nasuta* Conrad, Clark, 1895; Clark, 1896

See *Corbula* sp.

*Corbula (Neaera) nasuta* var. *ima* de Gregorio

See *Caryocorbula alabamiensis* variation "*ima*" (de Gregorio)

*Corbula (Neaera) nasuta* var. *tecla* de Gregorio

See *Caryocorbula alabamiensis* variation "*tecla*" (de Gregorio)

#### "*Corbula*" *nasutoides* Whitfield

Corbulidae

*Corbula (Neaera) nasutoides* Whitfield, 1885, p. 239, pl. 30, figs. 18, 19; Whitfield, 1899, p. 156

? *Corbula nasutoides* Whitfield, Dall, 1898b, p. 846

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr. Localities.—N.J.: Monmouth Co., Shark R. (type); "at Dr. Kneiskern's pits"

*Type*.—Holotype, No. 7807, State Mus., Trenton, N.J.

*Corbula Natchitochiensis* Hilgard in Hopkins, 1871, p. 11 *nomen nudum*

*Corbula oniscus* Conrad, 1833a; Conrad, 1846c only in part

See cf. *Caestocorbula muchisonii* (Lea)

*Corbula oniscus* Conrad, Clark, 1895; 1896; Clark and Martin, 1901, in part; Shimer and Shrock, 1944

See *Corbula* sp.

See also cf. *Caestocorbula muchisonii* (Lea)

*Corbula oniscus* Conrad, 1846c in part, not Conrad, 1833a

See *Parmicorbula gibbosa* (Lea)

*Corbula oniscus* Conrad, Heilprin, 1881; not Conrad, 1833a

See *Vokesula aldrichi* (Meyer)

*Corbula pearlensis* Meyer

See *Biocorbula pearlensis* (Meyer)

#### *Corbula perdubia* de Gregorio

Corbulidae

*Corbula (Neaera) perdubia* de Gregorio, 1890, p. 233, pl. 36, figs. 31,

32 = *C. compressa* Lea *fide* Harris, 1919, p. 187 young; Cossmann, 1893, p. 6 as *Corbula* only

*Corbula (Aloidis) perdubia* de Gregorio, Dall, 1898b, p. 844 in part  
 Not *Corbula perdubia* of authors, Harris and Palmer, 1946, p. 114 Red  
 Bluff; Brann and Kent, 1960, p. 268 cf. *C. laqueata* Casey, 1903  
 See *Corbula compressa* Lea

*Range*.—Age unknown. Middle Eocene. Gosport sd. if equals *C. compressa* Lea

*Locality*.—Locality unknown

*Type*.—Formerly De Gregorio Coll. Univ. Palermo, Palermo, Sicily. Lost

*Corbula (Neaera) prima* Aldrich  
 See *Cuspidaria prima* (Aldrich)

*Corbula (Anapteris) regalis* Van Winkle  
 See *Anapteris regalis* Van Winkle

*Corbula rugosa* Lamarck, Heilprin, 1881, not Lamarck, 1806a, p. 467  
 See *Vokesula aldrichi* (Meyer)

*Corbula rugosa* Lamarck, Heilprin, 1891, not Lamarck, 1806a, p. 467  
 See *Vokesula smithvillensis smithvillensis* (Harris)

? *Corbula (Caryocorbula) santanensis* (Gardner)  
 See *Caryocorbula deusseni* (Gardner)

*Corbula smithvillensis* Harris  
 See *Vokesula smithvillensis smithvillensis* (Harris)  
 See also *Vokesula smithvillensis petropolitana* Stenzel and Twining

#### **Corbula subcompressa** Gabb

#### **Corbulidae**

*Corbula subcompressa* Gabb, 1860d, p. 394, pl. 68, fig. 24; Harris, 1896, p. 68, pl. 6, fig. 9 syntype *fide* Harris; Johnson, 1905, p. 17; Shimer and Shrock, 1944, p. 431, pl. 172, fig. 12 copy Harris  
 Not *Corbula subcompressa* Gabb, Whitfield, 1885, p. 180, pl. 23, fig. 26 Cretaceous

*Corbula* sp. Harris, 1894b, p. 45, pl. 1, fig. 6

*Corbula (Cuneocorbula) subcompressa* Gabb, Dall, 1898b, p. 841

*Range*.—Paleocene. Clayton fm., lower Midway gr.; Porters Creek fm. (type), upper Midway gr.

*Localities*.—TENN.: *Hardeman Co.*, R.R. cut 2 mi. E. of Middleton (type); Hannah's. GA.: *Clay Co.*, Chattahoochee R. above Sandy Cr. ALA.: *Wilcox Co.*, Matthews Ldg., Alabama R. ARK.: *Pulaski Co.*, Marshall's well, Capitol Hill, Little Rock (Harris)

*Types*.—Syntypes, Safford Coll., unknown. (Seen by Harris, 1896); ? ANSP (Johnson, 1905)

#### **Corbula subengonata** Dall

#### **Corbulidae**

*Corbula engonata* Conrad, Aldrich, 1886, p. 58; not Conrad, 1848a, b  
*Corbula alabamensis* Lea var. Harris, 1897b, p. 68, pl. 13, figs. 14, 14a; Brann and Kent, 1960, p. 255 as "hypotype"  
*Corbula subengonata* Dall, 1898b, p. 841; Harris, 1919, p. 185, pl. 56, figs. 1-4, 7; 5, 6, 8 vars.; Brann and Kent, 1960, pp. 271, 272

Not *Corbula nasuta* Conrad, Clark, 1895, p. 5; Clark, 1896, p. 74 see *Corbula* sp.

Not *Corbula subengonata* Dall, Clark and Martin, 1901, p. 163 in part, not pl. 32, figs. 1, 1a, 2, 2a, 2b see *Corbula* sp.

*Range*.—Lower Eocene. Tuscahoma fm. (type), middle Wilcox [Sabine] gr.

*Localities*.—ALA.: Monroe Co., Gregg's Ldg., Alabama R. (type); Bells Ldg., Alabama R. (Aldrich); Clarke Co., Woods Bluff, Tombigbee R.; Wilcox Co., Lower Peach Tree Ldg., Alabama R.; Choctaw Co., Tuscahoma Ldg., Tombigbee R.

*Type*.—Lectotype, No. 182 PRI (Harris specimen). The syntype to which Dall gave the new name *Corbula subengonata* would be in the USNM or the Harris specimen, pl. 13, figs. 14, 14a. There is no specimen in the USNM to which Dall gave the name. We are designating herein No. 182 PRI as the lectotype.

*Corbula subengonata* Dall, Clark and Martin, 1901; not Dall, 1898b  
See *Corbula* sp.

*Corbula subnasuta* d'Orbigny, 1850  
See *Caryocorbula alabamiensis* (Lea)

*Corbula texana* Gabb  
See *Notocorbula texana* (Gabb)

*Corbula* (*Aloides*) *wailesiana* Harris in Dall  
See *Caestocorbula wailesiana* (Harris in Dall)

*Corbula willistoni* Meyer  
See *Caryocorbula willistoni* (Meyer)

*Corbula* (*Caryocorbula*) *willistoni arkansia* Harris  
See *Caryocorbula willistoni arkansia* Harris

*Corbula* (*Caryocorbula*) spp.  
See *Caryocorbula* spp.  
See also *Caryocorbula deussenii* Gardner

***Corbula* (*Caryocorbula*) sp. indet. Corbulidae**  
*Corbula* (*Caryocorbula*) sp. indet. Gardner, 1935, p. 192

*Range*.—Paleocene. Kincaid fm., lower Midway gr.  
*Locality*.—TEXAS: Kaufman Co., USGS Sta. 11665, Water Hill, 5 mi. NE. Kemp  
*Type*.—Unfigured specimen probably USNM

***Corbula* sp. Corbulidae**  
*Corbula subengonata* Dall, Clark and Martin, 1901, p. 163 in part

*Range*.—Paleocene. Aquia fm.  
*Localities*.—MD.: Charles Co., Glymont. For additional localities see Clark and Martin  
*Types*.—Unfigured specimens, USNM

***Corbula* sp. Corbulidae**  
*Corbula nasuta* Conrad, Clark, 1895, p. 5; Clark, 1896, p. 74. Not *C. nasuta* Conrad, 1833b, p. 38  
*Corbula subengonata* Dall, Clark and Martin, 1901, p. 163 in part, pl. 32, figs. 1, 1a, 2, 2a, 2b. Not *C. subengonata* Dall, 1898b, p. 841

*Range*.—Lower Eocene. Nanjemoy fm., (figured)  
*Localities*.—MD.: Charles Co., Popes Cr. VA.: King George Co., Woodstock  
*Type*.—Specimen figured, USNM



**Corbula sp.****Corbulidae**

*Corbula oniscus* Conrad, Clark, 1895, p. 5; Clark, 1896, p. 75; Clark and Martin, 1901, p. 164 in part, pl. 32, figs. 7, 7a, 8, 8a, 8b; Shimer and Shrock, 1944, p. 431, pl. 172, figs. 10, 11 copies Clark and Martin. Not *C. oniscus* Conrad, 1833a, p. 341

*Range*.—Lower Eocene. Nanjemoy fm.

*Locality*.—VA.: Prince George Co., Evergreen (specimens figured)

*Types*.—Specimens figured, USNM

**Corbula sp.****Corbulidae**

*Corbula* sp. Barry, 1942+, p. 75, pl. 10, fig. 5

*Range*.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr.

*Locality*.—LA.: De Soto Par., auger hole on hillside on S. side on Hunter-Converse Highway, 0.1 mi. N. of De Soto-Sabine Par. line in sec. 16, T. 10 N., R. 14 W., depth 13 ft.

*Type*.—Figured specimen, No. 5032 LSU Pal. Mus.

*Corbula* sp. Harris, 1894b

See *Corbula subcompressa* Gabb

*Crassatella versus* *Crassatellites*

Keen, Nautilus, vol. 65, No. 1, p. 14, 1951

*Crassatella* synonym *Mactra*; *Crassatellites nomen nudum*

*Crassatella alaeformis* Conrad

See *Bathytormus alaeformis* (Conrad)

**Crassatella alta** Conrad**Crassatellidae**

*Crassatella alta* Conrad, 1832b, p. 21, pl. 7; (Harris reprint, 1893, p. 39, pl. 7); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 395, pl. 3, fig. 1; H. C. Lea, 1849, p. 98; Bronn, 1848a, p. 343; d'Orbigny, 1850, p. 383; not Conrad, 1855, p. 9 (Dall reprint, 1909, p. 163); Tuomey, 1858, pp. 265, 273, not p. 271 = Bells Ldg.; Dana, 1863, fig. 799; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5 in part; de Gregorio, 1890, p. 197, pl. 25, figs. 16, 17 copy Conrad, 1833; pl. 26, figs. 1-9, fig. 10 copy Conrad, 1846; Cossmann, 1893, p. 13; Dana, 1895, fig. 1485 same as 1863; Harris, 1895b, p. 3; Brann and Kent, 1960, p. 279

? *Crassatella alta* Conrad, Whitfield, 1885, p. 234, pl. 29, fig. 17

Not *Crassatella alta*, (Conrad), Clark and Martin, 1901, p. 182, pl. 42, fig. 3 *Crassatella* sp.

*Crassatellites altus* (Conrad), Dall, 1903a, p. 1469; Harris, 1919, p. 104 (not "Dall" as in text), pl. 35, fig. 6; pl. 36, figs. 4-6; Brann and Kent, 1960, pp. 283, 284

*Crassatellites alta* (Conrad), Cooke, 1926a, pl. 95, fig. 2; Semmes, 1929, fig. 61-2; Scott, 1932, p. 328, pl. 23, fig. 4

? *Crassatellites alta* (Conrad), Kellum, 1926, p. 22

Cf. *Crassatella alta* Conrad, Richards, 1950, p. 18

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). Cf. N. C.: New Hanover Co., Castle Hayne Quarry (Kellum; Richards). [Not N. J.: Monmouth Co., Shark R. (Whitfield)]. [Not N. C.: Pender Co., Rocky Point (Kellum)]. [Not MD.: Prince Georges Co., Hardesty, (Clark and Martin)]

*Types*.—Probable syntypes (8), No. 30529, ANSP Moore, 1962, p. 36

*Crassatella alta* Conrad, Tuomey, 1858, p. 271  
See *Crassatella tumidula* Whitfield

*Crassatella alta* (young) Heilprin, 1884b, p. 38  
See *Lirodiscus smithvillensis* (Harris)

**Crassatella antestriata** Gabb Pl. 2, figs. 6, 7 **Crassatellidae**

*Crassatella antestriata* Gabb, 1860d, p. 388, pl. 67, fig. 53; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5; Heilprin, 1891a, p. 403; Harris, 1895a, p. 49, pl. 1, figs. 10, 10a

Probably not *Crassatella antestriata* Gabb, Aldrich, 1887, p. 81

*Crassatellites antestriatus* (Gabb), Harris, 1919, p. 98, pl. 34, figs. 2, 3; Renick and Stenzel, 1931, pp. 95, 104, pl. 6, fig. 5; Gardner, 1945, p. 90, pl. 6, figs. 7, 10, 11, 14; pl. 7, figs. 9, 10

*Range*.—Middle Eocene. Wheelock mem. (type), Cook Mt. fm., upper Claiborne gr.; Laredo fm., upper Claiborne gr.

*Localities*.—TEXAS: *Robertson Co.*, Wheelock [type *fide* Gardner, 1945]; *Lee Co.*, Elm Cr. between Evergreen and Orell's crossing; *Houston Co.*, Alabama Bluff, Trinity R.; 5 mi. W. of Crockett, Hurricane Bayou; *Cherokee Co.*, Baptizing Cr.; *Brazos Co.*, Little Brazos R.; *Burleson Co.*, Moseley's Ferry (Stone City Bluff) NE. MEXICO, 4 localities State of Nuevo León [see Gardner, 1945, p. 91]

*Types*.—Holotype and three paratypes, No. 13259 ANSP

**Crassatella aquiana** Clark **Crassatellidae**

*Crassatella aquiana* Clark, 1895, p. 5; Clark, 1896, p. 82, pl. 26, figs. 2a-c

*Crassatellites aquiana* (Clark), Clark and Martin, 1901, p. 181, pl. 42, figs. 1, 2a, 2b; Dall, 1903a, p. 1469 as *aquianus*

*Range*.—Paleocene. Aquia fm., (type)

*Localities*.—VA.: *Stafford Co.*, Aquia Cr. (type); Potomac Cr. MD.: *Charles Co.*, Reedy Run; Liverpool Point; Mattawoman; Glymont; *Prince Georges Co.*, Brooks Estate near Seat Pleasant

*Types*.—Syntypes, JHU, 1962

*Crassatella capri-cranium* Rogers and Rogers  
See *Bathytormus alaeformis* (Conrad)

*Crassatella clarkensis* Dall  
See *Bathytormus clarkensis* (Dall)

*Crassatella clarkensis ferrocarolina* (Harris)  
See *Bathytormus clarkensis ferrocarolinus* (Harris)

*Crassatella clarkensis ludoviciana* (Harris)  
See *Bathytormus clarkensis ludovicianus* (Harris)

**Crassatella conradi** Whitfield **Crassatellidae**

*Crassatella Conradi* Whitfield, 1885, p. 209, pl. 28, figs. 1-5 as *C. curta* Conrad; Whitfield, 1899, p. 156; Weller, 1907, p. 559 in synonymy of *C. littoralis* Conrad, 1869a, fig. 9 syntype *C. conradi*, fig. 10 copy Whitfield

- Range*.—Lower Eocene. Manasquan fm. (syntype). Middle Eocene Shark R. ml. (syntype), upper Claiborne group  
*Localities*.—N. J.: Monmouth Co., Shark R. (syntype), Squankum (syntype); Ocean Co., New Egypt (syntype)  
*Types*.—Syntype, Columbia Univ. lost; syntype, No. 9015/1 AMNH; syntype, Rutgers lost

**Crassatella curta** Conrad [questionable]**Crassatellidae**

- Crassatella curta* Conrad, 1863b, p. 578 no description *nomen nudum*;  
 Conrad, 1866e, p. 104, pl. 8, fig. 2 "Va.?"  
 ? *Crassatellites curtus* (Conrad), Dall, 1903a, p. 1469 = *C. altus*  
 Conrad young *fide* Dall

*Range*.—?

*Locality*.—"Virginia ?" (type)

*Type*.—"USNM", Dall, 1903a. "Conrad gave no locality, but specimen USNM 1600 is catalogued as (Eastern Shore, Va.) and this probably is the erroneous locality referred to by Dall" (per. com., D. Wilson, June 16, 1962). [ANSP missing Moore, 1962, p. 52]

**Crassatella declivis** Heilprin

See *Bathytormus alaeformis* (Conrad)

**Crassatella Delawarensis** Gabb, Whitfield, 1885; not Gabb, 1860a

See *Crassatella* sp.

**Crassatella eutawcolens** (Harris)**Crassatellidae**

- Crassatellites eutawcolens* Harris in Van Winkle and Harris, 1919, p. 14, pl. 2, fig. 4; Brann and Kent, 1960, p. 285  
*Crassatella eutawcolens* (Harris), Richards and Palmer, 1953, p. 46, pl. 10, fig. 4

*Range*.—Middle Eocene. Santee ls. (type), upper Claiborne gr. Upper Eocene. Inglis fm., lower Ocala gr.

*Localities*.—S. C.: Orangeburg Co., Eutaw Springs (type). FLA.: Levy Co., Gulf Hammock

*Type*.—Holotype, No. 1404, PRI

**Crassatella flexura** Conrad

See *Bathytormus flexurus* (Conrad)

**Crassatella flexurus** Conrad "var."

See *Bathytormus clarkensis postclarkensis* (Harris)

**Crassatella flexura postclarkensis** (Harris)

See *Bathytormus clarkensis postclarkensis* (Harris)

**Crassatella flexura producta** Conrad

See *Bathytormus flexurus productus* (Conrad)

**Crassatella gabbi** Safford**Crassatellidae**

- Crassatella pteropsis* Gabb (not Conrad), 1860d, p. 395 in part, pl. 68, fig. 28. Not *C. pteropsis* Gabb, Schuchert, *et al.*, 1905, p. 174 = Cretaceous  
 Not *Crassatella pteropsis* Conrad, 1860, p. 279, pl. 46, fig. 9

*Crassatella gabbi* Safford, 1864, p. 368 new name; Safford, 1869, p. 419 name only; Harris, 1896, p. 63 in part, pl. 5, figs. 7, 7a type, 8, 9, not figs. 10, 11 see *C. kennedyi* Harris *nomen nudum* see *C. sp.*; Brann and Kent, 1960, p. 281

*Crassatella tumidula* Whitfield, Aldrich, 1894b, p. 242

*Crassatella* sp. Harris, 1894b, p. 43

*Crassatella gabbi* (Safford), Dall, 1903a, p. 1469; Gardner, 1935, p. 151; Shimer and Shrock, 1944, p. 419, pl. 167, fig. 5 copy Harris

*Range*.—Paleocene. Kincaid fm., lower Midway gr.; Porters Creek fm. (type), upper Midway gr.

*Localities*.—TENN.: *Hardeman Co.*, 2 mi. S. of Middleton (type); 2 mi. E. of Middleton; Hannah's 1  $\frac{3}{4}$  mi. NE. of Crainesville;  $\frac{1}{2}$  mi. W. of Hannah's; Huddleston's 3 mi. W. of Crainesville; McDonald's mill, 4 mi. SW. of Middleton. MISS.: *Tippah Co.*, Reeves, 2  $\frac{1}{2}$  mi. NW. of Walnut. ALA.: *Wilcox Co.*,  $\frac{3}{4}$  mi. W. of Prairie Bluff;  $\frac{1}{4}$  mi. NW. of Prairie Bluff; 1  $\frac{1}{2}$  mi. SW. of Palmer's mill at S. McConnico's; 1 mi. S. of Palmer's mill; *Barbour Co.*, 1  $\frac{1}{3}$  mi. NE. of Clayton. GA.: probably Ga. side of Chattahoochee R., 3 mi. below mouth of Pataula Cr. TEXAS: for localities in Kaufman, Guadalupe, Medina, Maverick Cos. see Gardner, 1935, p. 152

*Type*.—Unknown. Type in Safford Coll. seen by Harris, 1896

#### **Crassatella halei** Harris

#### **Crassatellidae**

*Crassatella Mississippensis* Conrad, Tuomey, 1858, pp. 265, 269, 271, not Conrad, 1848b, p. 122

? *Crassatella* sp. Aldrich, 1886, p. 57

*Crassatella halei* Harris, 1897b, p. 57, pl. 11, fig. 5; Brann and Kent, 1960, p. 281

*Crassatella Halei* Harris, Dall, 1903a, p. 1469; Shimer and Shrock, 1944, p. 419, pl. 167, fig. 12 copy Harris

*Range*.—Lower Eocene. Nanafalia fm; Greggs Ldg. mem. (type), Tuscahoma fm.; and Bashi mem., Hatchetigbee fm.; respectively lower, middle, and upper Wilcox [Sabine] gr.

*Localities*.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type); *Wilcox Co.*, Yellow Bluff, Alabama R.; *Marengo Co.*, Nanafalia Ldg., Tombigbee R.

*Type*.—Holotype, No. 140 PRI

#### **Crassatella inglisia** Richards

#### **Crassatellidae**

*Crassatella inglisia* Richards in Richards and Palmer, 1953, p. 46, pl. 9, figs. 9, 10

*Range*.—Middle Eocene. Avon Park ls. (type), upper Claiborne gr. Upper Eocene. Inglis fm., lower Ocala gr.

*Localities*.—FLA.: *Levy Co.*, Sulphur Springs Ldg. left bank Wekiva R., SW.  $\frac{1}{4}$  NW.  $\frac{1}{4}$ , sec. 32, T. 14 S., R. 16 E. (type); SW.  $\frac{1}{4}$ , sec. 34, T. 14 S., R. 16 E; Inglis, right bank Withlacoochee R., SE.  $\frac{1}{4}$  NW.  $\frac{1}{4}$ , sec. 3, T. 17 S., R. 16 E; road metal pit, NE.  $\frac{1}{4}$  SW.  $\frac{1}{4}$ , sec. 14, T. 15 S., R. 16 E.

*Types*.—Holotype, I-7541, paratype No. I-7542, Fla. Geol. Sur.

**Crassatella ioannes** (Gardner)**Crassatellidae**

*Crassatellites ioannes* Gardner, 1935, p. 153, pl. 11, fig. 1-6

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.; Wills Point fm., upper Midway gr.

*Localities*.—TEXAS: *Bastrop Co.*, Colorado R., 4 mi. below Webberville (type);  $1\frac{1}{2}$  mi. below Travis-Bastrop Co. line;  $4\frac{1}{2}$ - $4\frac{3}{4}$  mi. below Webberville

*Types*.—Holotype, No. 370909; paratype, No. 370910 USNM

*Crassatella kennedyi* Harris *nomen nudum* Texas ms referred in Harris, 1896, p. 63 as name never published

See *Crassatella gabbi* Safford

See *Crassatella* sp.

**Crassatella littoralis** Conrad**Crassatellidae**

*Crassatella littoralis* Conrad, 1868, p. 731, *nomen nudum*; Conrad, 1869b, p. 41, pl. 1, fig. 3, Whitfield, 1885, p. 212, pl. 28, figs. 6, 7

*Crassatellites littoralis* (Conrad), Dall, 1903a, p. 1469; Weller, 1907, p. 559, pl. 61, figs. 9, 10

*Range*.—Lower Eocene. Manasquan fm. (Weller). Middle Eocene. ? Shark R. ml. (type), upper Claiborne gr.

*Localities*.—N.J.: *Monmouth Co.*, ? Shark R. (type); Squankum; ? Farmingdale (Weller)

*Type*.—Missing ANSP, Moore, 1962, p. 72

*Crassatella minor* (Lea), Harris, 1919 in part

See *Crassinella aldrichi* Gardner

See also *Crassinella minor* (Lea)

*Crassatella mississippiensis* Conrad, Tuomey, 1858. Not Conrad, 1848b

See *Crassatella halei* Harris

**Crassatella negreetensis** (Harris)**Crassatellidae**

*Crassatellites negreetensis* Harris, 1919, p. 97, pl. 33, figs. 6-8; Brann and Kent, 1960, p. 285

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—LA.: *Sabine Par.*, 200 yds. below mouth of Negreet Bayou (type). Possibly S. C.: *Orangeburg Co.*, Eutaw Springs

*Types*.—Syntypes, Nos. 706-708 PRI

**Crassatella ? obliquata** Whitfield**Crassatellidae**

*Crassatella obliquata* Whitfield, 1885 p. 235, pl. 29, fig. 18; pl. 30, figs. 13, 14; Whitfield, 1899, p. 156

? *Crassatellites obliquatus* (Whitfield), Dall, 1903a, p. 1469; Harris, 1919, pp. 103-104, doubts species is a *Crassatella*

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N. J.: *Monmouth Co.*, Shark R. (type)

*Type*.—Holotype, No. 7814 State Mus., Trenton, N.J.

**Crassatella ocordia** Harris**Crassatellidae**

*Crassatella ocordia* Harris, 1951, p. 20, pl. 10, figs. 1, 2, 3-4 ?; Brann and Kent, 1960, p. 281



*Range*.—Upper Eocene. "Ocala ls." (type), Ocala gr.

*Localities*.—GA.: *Houston Co.*, Pennsylvania Cement Corp., Clinchfield Quarry W. side (type). FLA.: *Marion Co.*, dump just SW. of mill and office Dixie Lime Products Co., Reddick

*Types*.—Syntypes, Nos. 24490–24492 PRI. Lectotype herein designated, No. 24490 PRI

*Crassatella palmula* Conrad

See *Bathytormus alaeformis* (Conrad)

### **Crassatella porcus** Harris

### **Crassatellidae**

*Crassatella porcus* Harris, 1951, p. 19, pl. 9, figs. 1-3

*Range*.—Uppermost Eocene. Bumpnose ls. (type)

*Locality*.—FLA.: *Jackson Co.*, quarry operated by Marianna Limestone Products Co., approximate center of sec. 23, T. 5N, R. 11 W., J-5, (type). Wayne Moore, 1955, p. 36

*Type*.—Holotype, lost

*Crassatella producta* Conrad

See *Bathytormus flexurus productus* (Conrad)

*Crassatella protexta* Conrad

See *Bathytormus protextus* (Conrad)

*Crassatella protexta* in De Gregorio, 1890

See *Bathytormus alaeformis* (Conrad)

*Crassatella protexta lepida* Dall in Cooke, 1943, p. 65 Ga. *nomen nudum*

*Crassatella protexta sina* Harris

See *Bathytormus protextus sinus* (Harris)

*Crassatella pteropsis* Gabb, 1860d in part. Not Conrad, 1860

See *Crassatella gabbi* Safford

### **Crassatella rhombea** Whitfield

### **Crassatellidae**

*Crassatella rhombea* Whitfield, 1885, p. 213, pl. 27, figs. 16-19; Whitfield, 1899, p. 156

*Crassatellites rhombea* (Whitfield), Weller, 1907, p. 561, pl. 61, fig. 8 (New Egypt)

*Range*.—Lower Eocene. Manasquan fm. (type)

*Locality*.—N. J.: *Ocean Co.*, New Egypt (syntype); *Monmouth Co.*, Squankum (syntype)

*Types*.—Syntype, formerly Columbia Univ. Coll. No. 19599 AMNH; syntype, No. 7458 State Mus., Trenton, N.J.

### **Crassatella rhomboidea** Conrad

### **Crassatellidae**

*Crassatella rhomboidea* Conrad, 1846c [May], p. 396, pl. 3, fig. 3 (not fig. 5 as in text and expl. of pl.); H. C. Lea, 1849, p. 98; Conrad, 1865a, p. 10

*Crassatella subrhomboidea* d'Orbigny, 1850, p. 383 new name. Not *C. rhomboidea* d'Archiac, 1846 [May +], p. 208

*Crassatellites rhomboideus* (Conrad), Dall, 1903a, p. 1469; Harris, 1919, p. 99, pl. 34, fig. 4 doubtful form

The name *C. rhomboidea* Conrad, 1846, May, is not preoccupied by *C. rhomboidea* d'Archiac, 1846, May + as supposed by D'Orbigny. The

following from D'Archiac, 1846, p. 217 explains that his publication was post May and pre July:

**Observation**

Ce Memoire ayant été présenté à la Société Géologique dans la séance du 4 Mai 1846, l'impression du texte et les planches commencés immédiatement étaient presque terminés lorsque parut, dans les premiers jours de juillet, la 22<sup>e</sup> livraison de l'Iconographie zoophytologique de M. H. Michelin . . .

*Range.*—Doubtful. If from Orangeburg, S. C., would be middle Eocene.

*Locality.*—"S. C.: Orangeburg Co., Orangeburg" (type)

*Type.*—Holotype, No. 30579 ANSP, Moore, 1962, p. 93

*Crassatella (Micromeris) senex* Meyer

See "*Venericardia*" sp.

**Crassatella sepulcollis** Harris

**Crassatellidae**

*Crassatella sepulcollis* Harris, 1896, p. 64, pl. 6, figs. 1, 1a; Brann and Kent, 1960, p. 282

*Crassatellites sepulcollis* (Harris), Dall, 1903a, p. 1469

*Range.*—Paleocene. Naheola gr. (type), upper Midway gr.

*Localities.*—ALA.: Wilcox Co.,  $\frac{1}{2}$  mi. W. of Graveyard Hill; 1 mi. N. of Allenton. Two locations not same as in Brann and Kent, 1960

*Types.*—Holotype, No. 64; paratype, No. 65 PRI. Not syntypes as in Brann and Kent, 1960

*Crassatella subrhomboidea* d'Orbigny

See *Crassatella rhomboidea* Conrad

**Crassatella texalta** Harris

**Crassatellidae**

*Crassatella texalta* Harris, 1895a, p. 49, pl. 2, fig. 2; Gimbrede, 1962, pp. 1118, 1119

*Crassatellites texaltus* (Harris), Dall, 1903a, p. 1469 in part; Harris, 1919, p. 103, pl. 36, figs. 1 holotype, 2, 3

*Range.*—Middle Eocene. Hurricane lentil (type), base of Landrum mem., Cook Mt. fm., upper Claiborne gr.

*Localities.*—TEXAS: Houston Co., Hurricane Bayou (Marster and Hodges' headright) (type); Alabama Bluff, Trinity R. MISS.: Clarke Co., Wautubbee; 4 mi. W. of Enterprise; Newton Co.,  $2\frac{1}{2}$  mi. E. of Newton. ? S. C.: Orangeburg Co., ? Eutaw Springs. ? N. C.: Craven Co., 17 mi. above Newbern on the Neuse R.

*Type.*—Holotype, No. 3580 BEG

**Crassatella texana** Heilprin

**Crassatellidae**

*Crassatella texana* Heilprin, 1891a, p. 406, pl. 11, fig. 6; Harris, 1895a, p. 50, pl. 2, fig. 1

*Crassatellites texanus* (Heilprin), Dall, 1903a, p. 1469; Harris, 1919, p. 97, pl. 34, fig. 1 same as Harris, 1895a; Gardner, 1945, p. 91

*Range.*—Middle Eocene. Weches fm. (type), middle Claiborne gr., Mount Selman fm., middle Claiborne gr.; Mexico (Gardner, p. 92); Cook Mt. fm., upper Claiborne gr.

*Localities*.—TEXAS: *Cherokee Co.*, near McBee's schoolhouse (Heilprin); 2 mi. E. of Alto (Heilprin); Berryman's land; Kimble Headright; *Houston Co.*, Murchison's Headright and Lively's Place; *Bastrop Co.*, Smithville, Colorado R. (Heilprin); San Augustine Co. [not St.] (Heilprin). MISS.: [? Co.] H. Johnson's place (Harris, 1919). ? S. C.: *Orangeburg Co.*, Eutaw Springs; Vance's Ferry, Santee R. (cast may be var. of this sp.). NE. MEXICO (Gardner, 1945, p. 92) [Type locality not known.]

*Type*.—Holotype, missing BEG 1964

### **Crassatella trapaquara Harris**

### **Crassatellidae**

*Crassatella trapaquara* Harris, 1895a, p. 49, pl. 2, figs. 3, 3a  
*Crassatellites trapaquarus* (Harris), Dall, 1903a, p. 1469; Harris, 1919, p. 96, pl. 33, figs. 1-5 (smaller fig. 3, type); Brann and Kent, 1960, p. 286, 287

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type); *Cherokee Co.*, 8 mi. E. of Alto; *Lee Co.*, Elm Cr., between Orrell's and Evergreen Crossing; *Houston Co.*, Murchison's Headright, N. boundary; R. Williams' Headright, NE. of Weches. ALA.: *Monroe Co.*, Lisbon; *Clarke Co.*, Coffeeville. LA.: *Winn Par.*, "Moore's Iron Mine", NW.  $\frac{1}{4}$  sec. 21, T. 10 N, R. 2 W., "Marble Quarry", Winnfield; *Bossier Par.*, Fillmore, 2 mi. N. of Haughton [not W. of Houghton sic]. MISS.: *Clarke Co.*, Chickasawhay R. and Graveyard Bridge near Enterprise; [? Co.] Johnsons Place (location unknown)

*Types*.—Holotype, No. 701; paratypes, No. 702-705 PRI

*Crassatella tumidula* Whitfield, Aldrich, 1894b, p. 242. Not Whitfield, 1865

See *Crassatella gabbi* Safford

### **Crassatella tumidula Whitfield**

### **Crassatellidae**

*Crassatella alta* Conrad, Tuomey, 1858, p. 271 only

*Crassatella tumidula* Whitfield, 1865, p. 267, pl. 27, fig. 16; Aldrich, 1886, p. 57; de Gregorio, 1890, p. 198, pl. 26, fig. 11 copy Whitfield; not Aldrich, 1894b, p. 242; Harris, 1897b, p. 56, pl. 11, figs. 3, 4; Whitfield, 1899, p. 156; Brann and Kent, 1960, p. 283

*Crassatellites tumidulus* (Whitfield), Dall, 1903a, p. 1469; Gardner, 1945, p. 91, pl. 6, figs. 4, 6 holotype

*Range*.—Lower Eocene. Greggs Ldg. mem., Tusahoma fm., middle Wilcox [Sabine] gr. (type)

*Localities*.—ALA.: *Monroe Co.*, "six mi. above Claiborne, west side of river" [exact locality not differentiated] (type); Greggs Ldg., Alabama R.; Bells Ldg., Alabama R.; *Wilcox Co.*, Yellow Bluff, Alabama R.

*Type*.—Holotype, No. UC 24476 CNHM

### **Crassatella wilcoxi (Brown and Pilsbry)**

### **Crassatellidae**

*Crassatellites wilcoxi* Brown and Pilsbry, 1912, p. 152, pl. 1, fig. 1; Richards, 1950, p. 18, fig. 61a

*Range*.—Upper Eocene. Castle Hayne ls. (type), Jackson gr.

*Locality*.—N. C.: New Hanover Co., Castle Hayne quarry, 1½ mi.

E. of Wilmington (type)

*Type*.—ANSP

*Crassatella* ? sp. Aldrich, 1886, p. 57

See *Crassatella halei* Harris

*Crassatella* sp. Harris, 1894b

See *Crassatella gabbi* Safford

**Crassatella sp.**

**Crassatellidae**

*Crassatellites alta* (Conrad), Clark and Martin, 1901, p. 182, pl. 42, fig. 3. Not *Crassatella alta* Conrad, 1832b

*Range*.—Paleocene. Aquia fm.

*Locality*.—MD.: Ann Arundel Co., Hardesty

*Type*.—Figured specimen, USNM

**Crassatella sp.**

**Crassatellidae**

*Crassatellites texalta* (Harris), Dall, 1903a, p. 1469 in part. Not *C. texalta* Harris, 1895a

*Crassatella* "alta—like forms" Harris, 1951, p. 18

*Range*.—Upper Eocene. "Ocala ls.," Ocala gr.

*Locality*.—FLA.: Marion Co., Ocala

*Types*.—Unfigured specimens, PRI (Harris)

**Crassatella sp.**

**Crassatellidae**

*Crassatella Delawareensis* Gabb, Whitfield, 1885, p. 210, pl. 27, figs. 14, 15. Not Gabb, 1860a, p. 303

*Range*.—Lower Eocene. Manasquan fm.

*Localities*.—N. J.: Monmouth Co., Farmingdale; Ocean Co., near New Egypt

*Types*.—Figured specimens unknown. Not at N.J. State Mus., Trenton, 1964

**? Crassatella sp.**

**Crassatellidae**

*Crassatella* sp. Harris, 1899b, p. 302

*Tellina* sp. Barry, 1942 +, p. 71, pl. 9, figs. 8, 9

*Range*.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.

*Localities*.—LA.: Natchitoches Par., Marthaville; La Nana Bayou. For localities in Natchitoches and Sabine Pars. see Barry, 1942 +, p. 71

*Type*.—Figured specimen, No. 5217 LSU Pal. Mus.

**Crassatella sp.**

**Crassatellidae**

*Crassatella kennedyi* Harris, Kennedy, 1895, p. 147 *nomen nudum* fide localities in Harris, Texas ms., p. 51

*Crassatella gabbi* Safford, Harris, 1896, p. 63 in part, pl. 5, figs. 10, 11, not *C. gabbi* Safford, 1864, p. 368

*Crassatellites* sp. Gardner, 1935, p. 152

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: "Milam Co., Brazos R., right bank at its very northern limit, 'Milam Bluff' of Penrose report. Kennedy, Taff, and Harris." Sta. 105, Harris ms. Texas Mus. (sta. of figured specimen).

*Type*.—Figured specimen, early Texas Geol. Sur., not found Bur. Ec. Geol., Univ. Texas, 1963

**Crassatella sp.**

**Crassatellidae**

*Crassatellites* sp. Clark and Martin, 1901, p. 183, pl. 42, figs. 4, 4a

*Range*.—Paleocene. Aquia fm.

*Locality*.—MD.: Charles Co., Clifton Beach

*Type*.—Figured specimen, USNM

**Crassatella species a**

**Crassatellidae**

*Crassatellites* species a Kellum, 1926, p. 22, pl. 3, fig. 1; Harbison, 1944, p. 4, pl. 2, fig. 1

*Range*.—Middle Eocene. Santee ls., upper Claiborne gr. *vide* Cooke and MacNeil, 1952, p. 20

*Localities*.—S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner. N. C.: New Hanover Co., Wilmington

*Type*.—Figured specimen, No. 353292 USNM (Kellum). Figured specimen ANSP (Harbison)

**Crassatella species b**

**Crassatellidae**

*Crassatellites* species b Kellum, 1926, p. 23, pl. 3, fig. 2; Harbison, 1944, p. 4

*Range*.—Middle Eocene. Santee ls., upper Claiborne gr. Upper Eocene. Castle Hayne ls., Jackson gr.

*Localities*.—S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner. N. C.: Pender Co., old Rock Point quarry; New Hanover Co., Wilmington

*Type*.—Figured specimen, No. 353293 USNM

**Crassatella sp.**

**Crassatellidae**

*Crassatella* sp. Harris and Palmer, 1946, p. 80, pl. 18, figs. 20, 21; Brann and Kent, 1960, p. 282

*Range*.—Upper Eocene. Lower Jackson gr.

*Locality*.—MISS.: Clarke Co., Garland Cr.

*Type*.—Figured specimen, No. 4301 PRI

**Crassatella sp.**

**Crassatellidae**

*Crassatella* sp. Harris, 1951, p. 18, pl. 8, figs. 5-7 (2 specimens); Brann and Kent, 1960, p. 282

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Localities*.—GA.: Houston Co., Pennsylvania Cement Corp., Plant 2, Clinchfield Quarry, W. side. FLA.: Marion Co., abandoned pit 1 mi. S. of Dixie Lime Products Co., office in Reddick or about 2.5 mi. NE. of Lowell, off Highway 441

*Types*.—Figured specimens, Nos. 24483, 24484 PRI

**Crassatella sp.**

**Crassatellidae**

*Crassatella* sp. Harris, 1951, p. 19, pl. 8, figs. 8-12; Brann and Kent, 1960, pp. 282, 283



*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Localities*.—FLA.: Marion Co., Ocala Lime Rock Corp., E. of Kendrick; Dixie Lime Products Co., Reddick. GA.: Houston Co., Pennsylvania Cement Corp., Clinchfield Quarry

*Types*.—Figured specimens, Nos. 24485-24489 PRI

### **Crassatella sp.**

### **Crassatellidae**

*Crassatella* sp. Richards and Palmer, 1953, p. 47, pl. 10, fig. 3

*Range*.—Upper Eocene. Inglis fm., lower Ocala gr.

*Locality*.—FLA.: Citrus Co., Dunnellon Phosphate Mining Co., SW.  $\frac{1}{4}$  SE.  $\frac{1}{4}$  sec. 10, T. 18 S., R. 19 E.

*Type*.—Figured specimen, No. I-7549 Fla. Geol. Sur.

*Crassatellites alaeformis* (Conrad)

See *Bathytormus alaeformis* (Conrad)

*Crassatellites alaeformis* (Conrad) "var." Aldrich, 1931, p. 6, pl. 6, fig. 5

See *Bathytormus protectus* (Conrad) young

*Crassatellites (Crassinella) aldrichi* Gardner

See *Crassinella aldrichi* Gardner

*Crassatellites (Crassinella) aldrichianus* Harris sp., Aldrich, 1911

See *Miodontiscus* sp.

*Crassatellites alta* (Conrad), Clark and Martin, 1901

See *Crassatella* sp.

*Crassatellites altus* (Conrad)

See *Crassatella alta* Conrad

*Crassatellites antestriatus* (Gabb)

See *Crassatella antestriata* Gabb

*Crassatellites aquiana* (Clark)

See *Crassatella aquiana* Clark

*Crassatellites clarkensis* Aldrich, 1911 not Dall, 1903a

See cf. *Miodontiscus timothii* new name

*Crassatellites clarkensis* Dall

See *Bathytormus clarkensis* (Dall)

*Crassatellites clarkensis ferrocrolinus* Harris

See *Bathytormus clarkensis ferrocrolinus* (Harris)

*Crassatellites clarkensis ludovicianus* Harris

See *Bathytormus clarkensis ludovicianus* (Harris)

*Crassatellites curtus* (Conrad)

See *Crassatella curta* Conrad

*Crassatellites eutawcolens* Harris

See *Crassatella eutawcolens* (Harris)

*Crassatellites flexurus* (Conrad)

See *Bathytormus flexurus* (Conrad)

*Crassatellites flexurus postclarkensis* Harris

See *Bathytormus clarkensis postclarkensis* (Harris)

- Crassatellites flexurus productus* (Conrad)  
See *Bathytormus flexurus productus* (Conrad)
- Crassatellites gabbi* (Safford)  
See *Crassatella gabbi* Safford
- Crassatellites halei* (Harris)  
See *Crassatella halei* Harris
- Crassatellites ioannes* Gardner  
See *Crassatella ioannes* (Gardner)
- Crassatellites littoralis* (Conrad)  
See *Crassatella littoralis* Conrad  
See also under *Crassatella conradi* Whitfield
- Crassatellites minor* (Lea)  
See *Crassinella minor* (Lea)
- Crassatellites minutissimus* (Lea)  
See *Micromeris minutissima* (Lea)
- Crassatellites negreetensis* Harris  
See *Crassatella negreetensis* (Harris)
- Crassatellites obliquatus* (Whitfield)  
See *Crassatella obliquata* Whitfield
- Crassatellites palmulus* (Conrad)  
See *Bathytormus alaeformis* (Conrad)
- Crassatellites (Cuna) parva* (Lea)  
See *Cuna parva* (Lea)
- Crassatellites productus* (Conrad)  
See *Bathytormus flexurus productus* (Conrad)
- Crassatellites protextus* (Conrad)  
See *Bathytormus protextus* (Conrad)
- Crassatellites (Scambula) psychopterus* Dall  
See *Lirodiscus (Crustuloidea) psychopterus* (Dall)
- Crassatellites pteleina* Gardner  
See *Crassinella pteleina* (Gardner)
- Crassatellites (Crassinella) pygmaea* (Conrad)  
See *Crassinella pygmaea* (Conrad)
- Crassatellites rhombea* (Whitfield)  
See *Crassatella rhombea* Whitfield
- Crassatellites rhomboideus* (Conrad)  
See *Crassatella rhomboidea* Conrad
- Crassatellites sepulcollis* (Harris)  
See *Crassatella sepulcollis* Harris
- Crassatellites texaltus* (Harris)  
See *Crassatella texalta* Harris
- Crassatellites texaltus* (Harris), Dall, 1903a, in part  
See *Crassatella* sp.

*Crassatellites texanus* (Heilprin)

See *Crassatella texana* Heilprin

*Crassatellites trapaquarus* (Harris)

See *Crassatella trapaquara* Harris

*Crassatellites tumidulus* (Whitfield)

See *Crassatella tumidula* Whitfield

*Crassatellites wilcoxi* Brown and Pilsbry

See *Crassatella wilcoxi* (Brown and Pilsbry)

*Crassatellites* sp.

See *Crassatella* sp.

*Crassina* ? *veta* Conrad, 1869b, not *Astarte veta* Conrad, 1869a

See "*Astarte*" *castanella* Whitfield

**Crassinella aldrichi** Gardner

**Crassatellidae**

*Crassatella minor* (Lea), Harris, 1919, p. 92 in part. Not *Astarte minor* Lea, 1833, p. 63

*Crassatellites* (*Crassinella*) *aldrichi* Gardner, 1927, p. 368, [pl. 2], figs. 14-17

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—TEXAS: *Wilson Co.*, 4 mi. SE. of Floresville (type)

*Types*.—Syntypes, No. 369249 USNM

**Crassinella minor** (Lea)

**Crassatellidae**

*Astarte minor* Lea, 1833, p. 63, pl. 2, fig. 38; H. C. Lea, 1849, p. 96;

Conrad, 1865a, p. 9; Harris, 1895b, p. 28

Not *Astarte parva* Lea, Conrad, 1865a, p. 9

*Astarte* (*Micromeris*) *minor* Lea, de Gregorio, 1890, p. 201, pl. 27, figs. 1-4; fig. 5 copy Lea

*Micromeris minor* (Lea), Cossmann, 1893, p. 13

*Crassatellites* (*Crassinella*) *minor* (Lea), Dall, 1903a, pp. 1475, 1480

*Crassinella minor* (Lea), Harris, 1919, p. 92 in part, pl. 32, figs. 14-17 (not to fig. 27 as in text); Brann and Kent, 1960, p. 288

*Range*.—Middle Eocene. Cf. Stone City beds, middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—TEXAS: *Lee Co.*, Elm Cr.; cf. *Houston Co.*, Alabama Bluff, Trinity R. ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5225 ANSP

**Cf. Crassinella neuseana** (Harris)

**Cf. Crassatellidae**

*Astarte neuseana* Harris, 1919, p. 92, pl. 32, fig. 13; Brann and Kent, 1960, p. 93

*Range*.—Eocene (type)

*Locality*.—N. C.: *Craven Co.*, Rocky Ldg., Neuse R. (type)

*Type*.—Holotype, (lost) PRI

**Crassinella pteleina** Gardner

**Crassatellidae**

*Crassatellites* (*Crassinella*) *pteleina* Gardner, 1927, p. 368, [pl. 2] figs. 18, 19

*Range*.—Middle Eocene. Yegua fm. (type), uppermost Claiborne gr.

*Locality*.—TEXAS: Lee Co., Elm Cr. (type)

*Type*.—Holotype, No. 369251 USNM

### **Crassinella pygmaea (Conrad)**

### **Crassatellidae**

*Gouldia pygmaea* Conrad, 1865b, p. 139; Conrad, 1865d, p. 212, pl. 21, fig. 5; Conrad, 1866a, p. 23

? *Gouldia perdita* Conrad, 1865a, p. 10 *nomen nudum*, maybe intended for *G. pygmaea*

*Crassatellites (Crassinella) pygmaea* (Conrad), Dall, 1903a, p. 1475

*Crassinella pygmaea* (Conrad), Harris and Palmer, 1946, p. 79, pl. 18, figs. 17, 18; Brann and Kent, 1960, p. 288

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Localities*.—MISS.: Clarke Co., "Enterprise" error for Garland Cr. (type) *fide* Aldrich, 1885c, p. 307; Hinds Co., Moodys Branch, Jackson

*Type*.—Probable holotype, No. 13226 ANSP Moore, 1962, p. 91

### **Crassostrea alabamiensis (Lea)**

### **Ostreidae**

*Ostrea alabamiensis* Lea, 1833, p. 91, pl. 3, fig. 71; Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 395; Conrad, 1865a, p. 14; Conrad, 1866a, p. 3; Heilprin, 1884c, p. 309, pl. 64, fig. 2 copy Lea; de Gregorio, 1890, p. 174, pl. 18, figs. 1, 2; figs. 3, 4 copies Lea; Cossmann, 1893, p. 18; Harris, 1895b, p. 3; not Harris, 1897b, p. 41, pl. 6, fig. 7; Dall, 1898b, pp. 678, 679 in part; Harris, 1919, p. 8, pls. 1, 2; pl. 6, fig. 1; not Harris and Palmer, 1946, pl. 5, fig. 4; Stenzel, 1957a, p. 887; Brann and Kent, 1960, pp. 630, 631

*Ostrea semilunata* Lea, 1833, p. 90, pl. 3, fig. 69; Conrad, App. in Morton, 1834, p. 6 = *O. sellaeformis* Conrad; H. C. Lea, 1849, p. 103; Heilprin, 1884c, p. 309, pl. 64, fig. 4 copy Lea; Cossmann, 1893, p. 18; Harris, 1895b, p. 41

*Ostrea lingua canis* Lea, 1833, p. 92, pl. 3, fig. 72; Conrad, App. in Morton, 1834, p. 6 = *O. alabamiensis* Lea; H. C. Lea, 1849, p. 103; Heilprin, 1884c, p. 309, pl. 64, fig. 3 copy Lea; Cossmann, 1893, p. 18; Harris, 1895b, p. 25

*Ostrea pincerna* Lea, 1833, p. 92, pl. 3, fig. 73; H. C. Lea, 1849, p. 103; Heilprin, 1884c, p. 309; Harris, 1895b, p. 34

*Ostrea alabamiensis* var. *semilunata* Lea, de Gregorio, 1890, p. 174, pl. 18, fig. 14 copy Lea

*Ostrea alabamiensis* var. *linguaecanis* Lea, de Gregorio, 1890, p. 174, pl. 18, figs. 6-11; figs. 12, 13 copy Lea

*Ostrea alabamiensis* var. *pincerna* Lea, de Gregorio, 1890, p. 174, pl. 18 [not 16 as in text]; fig. 5 copy Lea

*Ostrea pincema* [sic] Lea, Cossmann, 1893, p. 18

*Ostrea claibornensis* Conrad ms. [*fide* Harris, 1895b, pp. 3, 11], *nomen nudum*; Dall, 1898b, p. 679 under *O. alabamiensis* Lea

*Crassostrea alabamiensis* (Lea), Stenzel, Krause, and Twining, 1957, p. 97

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Holotype, No. 5439 ANSP. Holotype *O. lingua canis* Lea, No. 5441 ANSP. Holotype *O. pincerna* Lea, No. 5442 ANSP. Holotype *O. semilunata* Lea, No. 5437 ANSP

**Crassostrea amichel (Gardner)****Ostreidae**

*Ostrea alabamiensis* of authors not *O. alabamiensis* Lea, 1833, p. 91

*Ostrea contracta amichel* Gardner, 1945, p. 81, pl. 3, figs. 1, 2; Perrilliat Montoya, 1963, p. 5, pl. 8, fig. 1; pl. 9, fig. 1; pl. 10, fig. 1; pl. 11, fig. 1

*Crassostrea amichel* (Gardner), Stenzel, Krause, and Twining, 1957, p. 97

*Range*.—Middle Eocene. Laredo fm. (type), upper Claiborne gr.; Yegua fm., uppermost Claiborne gr. (Lonsdale and Day, 1937, p. 55; Patterson, 1942, p. 259)

*Localities*.—TEXAS: Webb Co., 1½ mi. N. of the crossing of Highway 80 over Arroyo Dolores, USGS 14057 (type). For further localities see Gardner, 1945, p. 82

*Types*.—Syntypes, No. 496573 USNM

**Crassostrea contracta (Conrad)****Ostreidae**

*Ostrea contracta* Conrad, 1856b, p. 269; Conrad in Emory, 1857, p. 160, pl. 18, figs. 1a-d; Dall, 1898b, p. 683 under *O. georgiana*; Schuchert, et al., 1905, p. 468; Gardner, 1945, pp. 81, 82; not Harris, 1951, p. 6 under *O. georgiana*; Perrilliat Montoya, 1963, p. 5, pl. 6, figs. 1, 2; pl. 7, figs. 1, 2

*Ostrea alabamiensis* (var. *contracta*) Conrad, Harris, 1919, pp. 8, 9 in part, pl. 4 only sole figure

*Ostrea alabamiensis georgiana* Conrad, Gardner 1923, p. 110, pl. 29, figs. 6, 7; pl. 30; Trowbridge, 1932, pl. 44, figs. 1, 2; pl. 45. Not Conrad, 1834, p. 156

*Range*.—Upper Eocene. Jackson gr. ["Probably" Harris, 1919]

*Localities*.—MEXICO: Tamaulipas, "Oyster Point, near Mier, Mexico", [not known see Gardner, 1945, p. 81]; 5 mi. above Roma, and opposite Mier (Emory)

*Types*.—Syntypes (2), No. 9904, USNM Moore 1962, p. 49

**Crassostrea frionis (Harris)****Ostreidae**

*Ostrea alabamiensis* var. *frionis* Harris, 1919, p. 9, pl. 5, fig. 1

*Ostrea alabamiensis* Lea, Renick and Stenzel, 1931, p. 104

*Ostrea frionis* Harris, Gardner, 1945, p. 82

*Crassostrea frionis* (Harris), Stenzel, Krause, and Twining, 1957, p. 95, pl. 12, figs. 3-10

*Range*.—Middle Eocene. Stone City beds, middle Claiborne gr., possibly Cook Mt. fm., upper Claiborne gr. (see Stenzel, Krause, and Twining, 1957, p. 96, horizon of holotype unknown)

*Localities*.—TEXAS: SE. corner Frio Co., San Miguel Cr. below De Viller's ranch (type); Burleson Co., Stone City Bluff, Brazos R.; Sabine Co., rt. bank of Sabine R. near center of long west-east reach of Harper's Bend (Bur. Ec. Geol. loc. No. 201-T-5)

*Type*.—Formerly in Texas State Mus. No. 1710 (1919), not located by Stenzel, et al., 1957

**Crassostrea gigantissima (Finch)****Ostreidae**

*Ostrea gigantissima* Finch, 1824, p. 39; Conrad, 1835a, p. 29 (Harris reprint, 1893, p. 77) in part; Harris, 1919, p. 200; Howe, 1937, p. 362, pl. 44, figs. 5, 6; Cooke and MacNeil, 1952, p. 26; Stenzel, Krause, and Twining, 1957, p. 97



*Ostrea gigantea* Vanuxem in Morton, 1828a, p. 69 *nomen nudum*; Heilprin, 1884a, p. 149. Not Heilprin, 1884b, p. 35; not *Ostrea gigantea* L. C. Johnson, 1889, p. 215—*O. blaniptedi* Howe, 1937, p. 362 Miocene  
*Ostrea georgiana* Conrad, 1834, p. 156; Conrad, 1835a, p. 29 (Harris reprint, 1893, p. 77); Conrad, 1842b, p. 179; H. C. Lea, 1849, p. 103; Dana, 1863, p. 519 in part, fig. 811 not Oligocene; Conrad, 1865a, p. 15; Conrad, 1865f, p. 71; Conrad, 1866a, p. 20; ? Hilgard in Hopkins, 1871, p. 12; not Heilprin, 1884b, pp. 35, 95; Heilprin, 1884c, p. 311 in part; not Aldrich, 1886, p. 43, not Smith and Johnson, 1887, p. 23; de Gregorio, 1890, p. 177 in part; ? Cossmann, 1893, p. 18; Dall, 1898b, p. 683 in part; not Harris in Dana, 1895, p. 898, fig. 1492; Veatch and Stephenson, 1911, pp. 243-247; ? Richards, 1950, p. 18; ? Harris, 1951, p. 6, pl. 1, figs. 1, 2; Brann and Kent, 1960, p. 634

*Ostrea georgiana forma normalis* Conrad, Dall, 1898b, p. 684 in part, Shell Bluff only

*Ostrea alabamensis forma georgiana* Conrad, Harris, 1919, p. 9, pl. 5, fig. 2, not text p. 8; Brann and Kent, 1960, p. 631

*Ostrea alabamensis* (var. *contracta*), Conrad, Harris, 1919, pp. 8, 9 in part, pl. 3 sole fig.; Brann and Kent, 1960, p. 631

*Ostrea alabamensis* subsp. *georgiana* Conrad, Kellum, 1926, p. 17 Pollocksville [Pollocksville], N.C.

Not *Ostrea georgiana* Conrad var. Richards, 1943, p. 519, pl. 86, figs. 1-3 Trent

*Range*.—Upper Eocene. Barnwell fm. (type)

*Locality*.—GA.: Burke Co., Shell Bluff, Savannah R. (type).

Other localities not verified

*Types*.—Type lost *vide* Pilsbry in Howe, 1937, p. 365. Neotype ANSP, designated and deposited by Howe, 1937. *Ostrea georgiana* Conrad missing, Moore, p. 1962, p. 63

#### Crassostrea sp.

#### Ostreidae

*Ostrea alabamensis* Lea, Harris and Palmer, 1946, pl. 5, fig. 4; not *O. alabamensis* Lea, 1833, p. 91; Brann and Kent, 1960, p. 631

*Range*.—Upper Eocene. Cf. upper Jackson gr.

*Locality*.—ARK.: St. Francis Co., Crow Cr.

*Type*.—Figured specimen, No. 4148 PRI

#### Crassostrea sp.

#### Ostreidae

*Ostrea alabamensis* Lea, Harris, 1897b, p. 41, pl. 6, fig. 7 not *O. alabamensis* Lea, 1833, p. 91; Brann and Kent, 1960, p. 630

*Range*.—Lower Eocene. Upper Wilcox [Sabine] gr.

*Locality*.—ALA.; Washington Co., Hatchetigbee Bluff, Tombigbee R.

*Type*.—Figured specimen, No. 217 PRI

#### Crassostrea sp.

#### Ostreidae

*Ostrea alabamensis* Lea var., Harris, 1919, p. 8, pl. 5, fig. 3

*Range*.—Middle Eocene. Weches fm., middle Claiborne gr.

*Locality*.—TEXAS: Burleson Co., Burleson Shell Bluff, Brazos R., 1 mi. below Burleson-Milam Co. line

*Type*.—Figured specimen, No. 55 Texas State Mus., 1919

*Crenella costata* (Lea)

See *Crenella margaritacea* (Conrad)

**Crenellá isocardioides (Lea)****Mytilidae**

*Hippagus isocardioides* Lea, 1833, p. 72, pl. 2, fig. 50; H. C. Lea, 1849, p. 100; Fischer, 1860, pp. 295, 300; Conrad, 1865a, p. 11; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 226, pl. 35, figs. 22-25; figs. 26-28 copy Lea; Cossmann, 1893, p. 17; Harris, 1895b, p. 23

*Crenella isocardioides* (Lea), Dall, 1898b, p. 803; Harris, 1919, p. 36, pl. 17, figs. 21-24; Stewart, 1930, p. 103; Brann and Kent, 1960, pp. 289, 290

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Probable holotype, No. 5301 ANSP

**Crenella ? latifrons Conrad****Pl. 1, figs. 4, 5 Mytilidae**

*Crenella latifrons* Conrad, 1860, p. 296; Conrad, 1865a, p. 11; Harris, 1895b, p. 24; Dall, 1898b, p. 803

? *Crenella latifrons* Conrad, Harris, 1919, p. 35, pl. 17, figs. 14-16

Not *Modiola tenuis* Meyer, 1887a, p. 10, pl. 2, fig. 7 identified same as

*Crenella latifrons* Conrad by Dall, 1898b, p. 798

*Range*.—Middle Eocene. Gosport sd., uppermost Claiborne gr. (? type)

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (? type), "Dr. Showalter" (type), Harris, 1899a, p. 44 stated the "Dr. Showalter" material probably came from Matthews Landing, Midway gr. Harris in 1895b and 1919, identified the specimens from Claiborne as *C. latifrons*. The type is in ANSP with no locality. Specimens have been found in the Claiborne but not in the Midway.

*Type*.—Type, ANSP, no locality *fide* Harris, 1919, p. 35; missing Moore, 1962, p. 69

**Crenella margaritacea (Conrad)****Mytilidae**

*Stalagmium margaritaceum* Conrad, 1833c, p. 39; (Harris reprint, 1893, p. 65); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 106; d'Orbigny, 1850, p. 390; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5; Harris, 1895b, p. 27; Nicol, 1945, p. 619

*Myoparo costatus* Lea, 1833, p. 74, pl. 2, fig. 51 as "*P. costatus*"; Conrad, App. in Morton, 1834, p. 8 = *Stalagmium margaritaceum*; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 13; Nicol, 1945, p. 618

*Crenella (Stalagmium) margaritaceum* Conrad, Conrad, 1860, p. 281

*Crenella costata* (Lea), de Gregorio, 1890, p. 185, pl. 22, figs. 8-14, fig. 15 copy Lea; Cossmann, 1893, p. 17

*Crenella margaritacea* (Conrad), Stoliczka, 1871, p. 368; Dall, 1898b, p. 803; Harris, 1919, p. 35, pl. 17, figs. 17-20; Stewart, 1930, p. 103; Brann and Kent, 1960, p. 290

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr. (Harris); Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). TEXAS: Lee Co. (Harris)

*Type*.—Lost *fide* Harris, 1919, p. 36; missing Moore, 1962, p. 73. Holotype, *M. costatus* Lea ANSP

**Crenella ? tenuis (Meyer)****Mytilidae**

*Modiola tenuis* Meyer, 1887a, p. 10, pl. 2, fig. 7; Harris, 1919, p. 35

*VolSELLA? tenuis* (Meyer), Harris and Palmer, 1946, p. 43, pl. 10, fig. 12 copy Meyer

*Crenella tenuis* (Meyer), Dall, 1898b, pp. 798, 803 in part, equal to *C. latifrons* "Claibornian and Jacksonian"

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Jackson (type)

*Type*.—Holotype, No. 638882 USNM

*Criocardium nucleolus* Whitfield

See *Cardium nucleolum* (Whitfield)

*Crustuloides* Harris, 1919

Subgenus of *Lirodiscus* Conrad, 1869. Type species *Crassatellites psychopterus* Dall, 1900; 1903a

### **Cubitostrea (Cubitostrea) divaricata** (Lea)

### **Ostreidae**

*Ostrea divaricata* Lea, 1833, p. 91, pl. 3, fig. 70; Conrad, App. in Morton, 1834, p. 6 = *O. sellaeformis* Conrad; H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 395 under *O. sellaeformis*; Conrad, 1865a, p. 15 under *O. sellaeformis* Conrad; Conrad, 1866a, p. 3; Heilprin, 1884b, p. 86; Heilprin, 1884c, p. 310, pl. 64, fig. 1 copy Lea; Cossmann, 1893, p. 19; Harris, 1895b, p. 16

*Ostrea flabellula* Lamarck, H. C. Lea, 1849, p. 103; Heilprin, 1884c, p. 310 not Lamarck, 1806a, p. 164

*Ostrea sellaeformis* var. *divaricata* Lea, de Gregorio, 1890, p. 176, pl. 19, fig. 13 copy Lea; Dall, 1898b, p. 677 in part, section *Cymbulostrea* p. 678; Harris, 1919, p. 12, pl. 9, fig. 7; Brann and Kent, 1960, p. 639

*Ostrea sellaeformis* mut. *vermilla* de Gregorio, 1890, p. 176 has been placed in part in *Cubitostrea divaricata* (Lea) by Stenzel, Krause, and Twining, 1957, p. 92. *C. divaricata* is from the Cook Mountain fm. (fide Stenzel). De Gregorio's collection is supposed to have come from the Gosport sand at Claiborne. Mixtures are suspected in his material, but positive evidence is not available. Hence it seems better in view of indefinite information to separate the forms retaining *O. vermilla* as the Gosport sand species. See *Cubitostrea sellaeformis vermilla* (de Gregorio)

*Ostrea (Cubitostrea) divaricata* Lea, Sacco, 1897b, p. 14; Stenzel, 1945, p. 39

*Cubitostrea (Cubitostrea) divaricata* (Lea), Stenzel, Krause, and Twining, 1957, p. 92, pl. 9, figs. 5, 7-11

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type fide Stenzel in Stenzel, Krause, and Twining, 1957)

MISS.: *Newton Co.*, Newton

*Type*.—Holotype, No. 5438 ANSP

### **Cubitostrea (Cubitostrea) linguafelis** (Whitfield)

### **Ostreidae**

*Ostrea (Alectrionia ?) linguafelis* Whitfield, 1885, p. 223, pl. 29, fig. 1; Dall, 1898b, p. 677 under *O. sellaeformis* Conrad; Whitfield, 1899, p. 162 as *linguifelis*. Whitfield's figure is suggestive of *C. sellaeformis* stock but without material the species has been left as described.

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N. J.: Monmouth Co., Shark R. (type)

*Type*.—Holotype, No. 7839, State Mus., Trenton, N. J.

**Cubitostrea ( ) lisbonensis (Harris)                      Ostreidae**

*Ostrea sellaeformis* (?) var. *lisbonensis* Harris, 1919, p. 12, pl. 9, figs. 1-6; Gardner, 1945, p. 79, pl. 1, figs. 20-22; Brann and Kent, 1960, pp. 639, 640

*Ostrea (Cubitostrea) lisbonensis* Harris, Stenzel, 1945, pp. 39-46

*Cubitostrea ( ) lisbonensis* (Harris), Stenzel, 1949, pp. 39-47, figs. 4, 6, 7

*Cubitostrea lisbonensis* (Harris), Stenzel, Krause, and Twining, 1957, p. 94

*Range*.—Middle Eocene. Tyus mem. and Viesca mem., Weches fm., middle Claiborne gr. (Stenzel); Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—LA.: *Natchitoches Par.*, Chestnut (type); *Natchitoches*; *Winn Par.*, Marble Quarry; *Bienville Par.*, 35 mi. SE. of Creston; *Lincoln Par.*, Chautauqua. ALA.: *Monroe Co.*, Lisbon, Alabama R.; *Hamilton Bluff*, Alabama R. TEXAS: *Burleson Co.*, Colliers Ferry, Brazos R.; *Brazos Co.*; *Robertson Co.*; *Cherokee Co.* MEXICO: Gardner, 1945

*Types*.—Syntypes, Nos. 381-386 PRI

**Cubitostrea (Cubitostrea) perplicata (Dall)                      Ostreidae**

*Ostrea sellaeformis perplicata* Dall, 1898b, p. 678; Schuchert, *et al.*, 1905, p. 472; Harris, 1919, pp. 13, 14, text fig. 1

*Ostrea (Cubitostrea) perplicata* Dall, Stenzel, 1945, p. 39+

*Cubitostrea (Cubitostrea) perplicata* (Dall), Stenzel, 1949, pp. 37, 42, 45, figs. 3, 6, 7; Stenzel, Krause, and Twining, 1957, p. 95

*Range*.—Middle Eocene. Tallahatta fm. (type), lower Claiborne gr.

*Locality*.—ALA.: *Covington Co.*, Caton's Bluff, Conecuh R., WNW. of Andalusia (type)

*Types*.—Syntypes, No. 129775 USNM

**Cubitostrea (Cubitostrea) petropolitana Stenzel and Twining                      Ostreidae**

*Ostrea sellaeformis* Conrad var. 1 in part, Renick and Stenzel, 1931, p. 104

*Cubitostrea (Cubitostrea) petropolitana* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 94, pl. 11, figs. 5-12

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: *Burleson Co.*, Stone City Bluff (type), Brazos R.

*Types*.—Holotype, No. 20670 BEG (figs. 7, 8); paratypes, No. 20674 BEG (figs. 5, 6); No. 20675 BEG (figs. 9, 10), No. 20676 BEG (figs. 11, 12); No. 20797-20800 BEG (unfigured paratypes)

**Cubitostrea (Cubitostrea) sanctiaugustini Stenzel and Twining                      Ostreidae**

In part *Ostrea falciformis* Conrad, 1863a, p. 291, not "Enterprise, Miss."; Conrad, 1865b, p. 140, pl. 11, fig. 1 not "Enterprise, Miss."; Conrad, 1866a, p. 3 "Ala." see *O. falciformis* Conrad [*Cubitostrea*]



*Cubitostrea* (*Cubitostrea*) *sanctiaugustini* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 93, pl. 10, figs. 1-7, text fig. 13 new name for *O. falciformis* Conrad in part not *O. falciformis* Goldfuss, 1833, p. 22; 1862 (2 ed.), p. 21

*Range*.—Middle Eocene. Tyus mem. (type), Weches fm., middle Claiborne gr.

*Locality*.—TEXAS: San Augustine Co., excavation E. of intersection of South Liberty and East Planters streets, 3 blocks E. and 3 blocks S. of SE. corner of the courthouse square, 0.4 mi. air-line distance SE. of courthouse, San Augustine (type of *C. sanctiaugustini* only)

*Types*.—Holotype, No. 60686 BEG (fig. 3); paratypes, No. 20701 BEG (figs. 1, 2); No. 20702 BEG (figs. 4, 5); No. 20703 BEG (figs. 6, 7); No. 20724 BEG (unfigured paratypes)

*Cubitostrea* (*Cubitostrea*) *sanctiaugustini* Stenzel and Twining in part  
See *Ostrea falciformis* Conrad [*Cubitostrea*]

# **Cubitostrea (cf. Cubitostrea) sellaeformis (Conrad)      Ostreidae**

*Ostrea sellaeformis* Conrad, 1832b, p. 27, pl. 13, fig. 2 (Harris reprint, 1893, p. 45, pl. 13, fig. 2); Morton, 1833b, p. 130; Conrad, App. in Morton, 1834, p. 6; Conrad, 1842b, p. 192, pl. 1, fig. 1 (from James R. below City Point, Va.); H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 395; Dana, 1863, fig. 798; Conrad, 1865a, p. 15 as [*stellaeformis*]; Conrad, 1866a, p. 3; Heilprin, 1884c, p. 311, pl. 62, figs. 1, 2; pl. 63, fig. 1; de Gregorio, 1890, p. 175, pl. 19, (not pl. 18 as in text) figs. 5, 6; fig. 11 copy *O. radians* Conrad, 1832b; fig. 12 copy Conrad, 1832b; pl. 20, fig. 5 copy Conrad, 1842b; Dana, 1895, fig. 1482 same as 1863; Harris, 1895b, p. 41; Clark, 1895, p. 5; Clark, 1896, p. 87 in part, pl. 35, figs. 1a-d James R., Va.; pl. 36, figs. 1a, b; ? Harris, 1897b, p. 41, pl. 6, fig. 2; Dall, 1898b, p. 677 in part; Clark and Martin, 1901, p. 192 in part, pls. 48, 49 copy Clark, 1896; Schuchert, et al., 1905, p. 472; Veatch, 1906, p. 37, pl. 19, figs. 1, 1a; Deussen, 1914, p. 56, pl. 5, figs. 1, 1a; O. B. Hopkins, 1917, p. 292, pl. 27, figs. 6, 6a; Harris, 1919, p. 10, pl. 6, figs. 2-12, pl. 7; ? Kellum, 1926, p. 17; Cooke, 1926a, p. 271 pl. 95 fig. 1; Semmes, 1929, fig. 61-1; not Renick and Stenzel, 1931, p. 104 (= *C. (C.) petropolitana* Stenzel and Twining); Stenzel, 1936, p. 276; Harbison, 1944, p. 4, pl. 3, fig. 6; Shimer and Shrock, 1944, p. 399, pl. 154, fig. 23 copy Clark and Martin; Gardner, 1945, p. 80; not Sutton, 1946, p. 1681; cf. Richards, 1948, p. 2, pl. 2, figs. 14, 15; Richards, 1950, p. 15; not McLean, 1956, p. 307 in chart; Brann and Kent, 1960, pp. 638, 639

*Ostrea radians* Conrad, 1832b, p. 27, pl. 13, fig. 1 (Harris reprint, 1893, p. 45, pl. 13, fig. 1); Conrad, App. in Morton, 1834, p. 6 = *O. sellaeformis* Conrad; Conrad, 1842b, p. 193; H. C. Lea, 1849, p. 103; Conrad, 1865a, p. 15 under *O. sellaeformis*; de Gregorio, 1890, pl. 19, fig. 11 copy Conrad

*Ostrea sellaeformis* mut. *laeta* de Gregorio, 1890, p. 176, pl. 19, figs. 1-4 (not pl. 11 as in text); Dall, 1898b, p. 678; ? Harris, 1919, p. 201, pl. 6, fig. 5 yg. of *C. sellaeformis* (Conrad); Brann and Kent, 1960, p. 639, No. 378

*Ostrea* (*Cubitostrea*) *sellaeformis* Conrad, Stenzel, 1945, pp. 39-41

*Cubitostrea sellaeformis* (Conrad), Stenzel, 1949, pp. 34-39, figs. 1, 2, 6, 7, 8; Stenzel, Krause, and Twining, 1957, p. 91 unnamed subgenus



*Range*.—Middle Eocene. Cook Mt. fm. (type); Wheelock mem., Cook Mt. fm., upper Claiborne gr.; Laredo fm., upper Claiborne gr.; Mexico (Gardner); Santee ls., upper Claiborne gr.

*Localities*.—ALA.: Monroe Co., "*Ostrea sellaeformis* zone" Claiborne Bluff, Alabama R. (type); Clarke Co., Coffeetown. VA.: James R. (illus. Conrad, Clark, 1896; Clark and Martin, 1901, copy). S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (Harbison). TEXAS: Burleson Co., Stone City Bluff above Stone City beds, Brazos R. MISS.: Clarke Co., Wautubbee; Enterprise. MEXICO: (Gardner, 1945)

*Types*.—Missing ANSP Moore 1962, p. 95. *Ostrea radians* Conrad missing ANSP Moore, 1962, p. 92. Holotype, *O. laeta* de Gregorio lost; formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily

Although De Gregorio's material was supposed to have come from the "sand" at Claiborne Bluff, apparently there was a mixture in the case of *C. sellaeformis*.

**Cubitostrea sellaeformis** Conrad "var." 1

**Ostreidae**

*Ostrea sellaeformis* Conrad var. 1, Renick and Stenzel, 1931, p. 104, in part, pl. 7, figs. 30, 31

*Range*.—Middle Eocene. Crockett fm., [Cook Mt. fm.], upper Claiborne gr.

*Locality*.—TEXAS: Brazos Co., Little Brazos R., near old inter-urban crossing

*Types*.—Figured specimens No. 21305 BEG (fig. 30); No. 21306 BEG (fig. 31)

**Cubitostrea ( ) sellaeformis vermilli** (de Gregorio)

**Ostreidae**

*Ostrea sellaeformis* mut. *vermilli* de Gregorio, 1890, p. 176, pl. 18, figs. 15-23

*Ostrea sellaeformis vermilli* de Gregorio, Dall, 1898b, p. 678; ? Harris, 1919, p. 12, cf. pl. 9, fig. 8; ? Stenzel, Krause, and Twining, 1957, p. 92 restricts var. *vermilli* de Gregorio to pl. 18, figs. 15-18 (not figs. 21-23 = *Cubitostrea divaricata* Lea)

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). LA.: ? Bienville Par. (Harris)

*Type*.—Formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost.

**Cubitostrea ( ) smithvillensis** (Harris)

**Ostreidae**

*Ostrea sellaeformis* var. *smithvillensis* Harris, 1919, p. 11, pl. 8; Brann and Kent, 1960, p. 640 = holotype.

*Ostrea (Cubitostrea) smithvillensis* (Harris), Stenzel, 1945, pp. 39-40a, 42-43

*Cubitostrea ( ) smithvillensis* (Harris), Stenzel, 1949, pp. 39-50, figs. 5-7

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

*Locality*.—TEXAS: Bastrop Co., Smithville, Colorado R. (type)

*Type*.—Holotype, No. 380 PRI [not hypotype as in Brann and Kent]

**Cucullaea compressirostra** (Whitfield)**Cucullaeidae**

*Idonearca compressirostra* Whitfield, 1885, p. 199, pl. 26, figs. 15, 16; Whitfield, 1899, p. 158

*Cucullaea compressirostra* (Whitfield), Weller, 1907, p. 399, pl. 32, figs. 3, 4 type; Richards, 1958, p. 79, pl. 12, figs. 3, 4

*Range*.—Paleocene. Hornerstown fm. (type)

*Localities*.—N. J.: Monmouth Co., Mr. J. S. Cook's pits, Tinton Falls, (above Tinton beds [Cretaceous] *vide* Weller, 1907, p. 156) (type) [not Trenton Falls as in Whitfield, 1899];  $\frac{3}{4}$  mi. SW. of Hornerstown

*Type*.—Holotype, State Mus., Trenton, N.J.

*Cucullaea depressa* Tuomey, 1848, p. 153 *nomen nudum*

This name was used by Tuomey in list of species from the middle Eocene of South Carolina.

**Cucullaea (Latiarca) gigantea** Conrad**Cucullaeidae**

*Cucullaea gigantea* Conrad, 1830, p. 227, pl. 10, fig. 4 [a $\hat{s}$  *Cucullaea*]; H. C. Lea, 1849, p. 98; Clark, 1895, p. 5; Clark, 1896, p. 84, pls. 30-33; Dall, 1898b, p. 603; Clark and Martin, 1901, p. 196, pls. 52-55; Scott, 1932, p. 328, pl. 23, fig. 3; Shimer and Shrock, 1944, p. 379, pl. 147, figs. 1, 2 copy Clark and Martin

*Cucullaea onochela* Rogers and Rogers, 1839b, p. 372, pl. 28, fig. 2; reprint 1884, p. 669, pl. 3, fig. 3 (3 figs); H. C. Lea, 1849, p. 98

*Trigonarca (Latiarca) gigantea* (Conrad), Conrad, 1863a, p. 289

*Trigonarca (Latiarca) onochela* [*sic*] (Rogers and Rogers), Conrad, 1863a, p. 289

*Latiarca gigantea* (Conrad), Conrad, 1865a, p. 11; Conrad, 1866a, p. 4; Stoliczka, 1871, pp. xxi, 383 "typical" not type designation as stated in Nicol, 1954, p. 97; Nicol, 1954, p. 97

*Latiarca onochela* (Rogers and Rogers), Conrad, 1865a, p. 11 *L. onochela* [*sic*]; Conrad, 1866a, p. 4 *L. onochela* [*sic*]

*Latiarca idonea* Conrad, 1872a, p. 53, pl. 2, fig. 1 [not Amer. Jour. Conch.—A.N.S.P. 1862, p. 289]

*Arca onochela* (Rogers and Rogers), Heilprin, 1884b, p. 87 in part

*Cucullaea (Latiarca) gigantea* Conrad, Rutsch, 1943, p. 150

*Cucullaea (Cyphoxis) gigantea* Conrad, Vokes, 1961, p. 50, pl. 10, figs. 10-11

*Range*.—Paleocene. Aquia fm. (type)

*Localities*.—VA.: Stafford Co., Aquia Cr.; King George Co., Potomac Cr.; 2 mi. below Potomac Cr.; Paspotansa Cr. MD.: Charles Co., Liverpool Point; 1 mi. SE. of Marion; Clifton Beach; Glymont; Prince Georges Co., 1 mi. NE. of Piscataway; Upper Marlboro; 3 mi. W. of Leeland; Fort Washington (type); Ann Arundel Co., Scheckel's Farm near South River; Hardesty; Queen Ann Co., Rolph's Ldg., Chester R.; Cecil Co., Fredericktown

*Types*.—Probable syntypes, No. 30495 ANSP Moore, 1962, p. 63.

*Latiarca onochela* (Rogers and Rogers) holotype probably MCZ

*Cucullaea gigantea* Conrad, Clark and Martin, 1901 in part

See *Cucullaea transversa* Rogers and Rogers

**Cucullaea (Cyphoxis) gigantea** Conrad "var."**Cucullaeidae**

*Cucullaea transversa* Rogers and Rogers, Aldrich, 1886, pp. 40, 57, pl. 4, figs. 11, 11a; de Gregorio, 1890, p. 196 in part, pl. 25, figs. 1a, b

copy Aldrich; Harris, 1894a, p. 302; Cooke, 1926a, pl. 94, fig. 8; Semmes, 1929, fig. 59-8. Not *Cucullaea transversa* Rogers and Rogers, 1839b

*Cucullaea gigantea* Conrad var., Harris, 1897b, p. 49, pl. 8, figs. 3, 3a, 4; Clark and Martin, 1901, p. 196 in part; Brann and Kent, 1960, p. 293

*Range*.—Lower Eocene. Tuscahoma fm., middle Wilcox [Sabine] gr.

*Localities*.—ALA.: Monroe Co., Greggs Ldg., Alabama R.; Bells Ldg., Alabama R.

*Types*.—Figured specimens (Harris), Nos. 143, 145 PRI

### ***Cucullaea kaufmanensis* Gardner**

### **Cucullaeidae**

*Cucullaea kaufmanensis* Gardner, 1935, p. 129, pl. 7, figs. 1-4; Rutsch, 1943, p. 149

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.

*Localities*.—TEXAS: Kaufman Co., NE. corner of the J. W. Boyce 120 acres in the W. F. Butler Survey on the public rd. about 2½ mi. NE of Kemp (type); 5 mi. NE. of Kemp. Additional localities see Gardner, 1935.

*Types*.—Holotype, No. 370959; paratypes, No. 370960, 370961 USNM

### ***Cucullaea laevis* Tuomey**

### **Cucullaeidae**

*Cucullae* [sic] *laevis* Tuomey, 1853, p. 194

*Cucullaea levis* Tuomey, Dall, 1898b, p. 603; Miller, B. L. and Stephenson, 1912, p. 55

*Range*.—Cretaceous mixed with Eocene. Near Wilmington, N.C.

Cretaceous is in contact with Tertiary (Stanton, 1891, pp. 333-334; Stephenson, 1923, p. 192; Kellum, 1926, p. 3)

*Locality*.—N.C.: New Hanover Co., Wilmington (type)

*Type*.—Unknown

### ***Cucullaea macrodonta* Whitfield**

### **Cucullaeidae**

*Cucullaea macrodonta* Whitfield, 1865, p. 267, pl. 27, fig. 17; not Harris, 1894b, p. 41; Harris, 1896, p. 51 in part, pl. 3, figs. 10, 10a; Dall, 1898b, p. 603; Whitfield, 1899, p. 156; Deussen, 1924, p. 43, pl. 14, figs. 6, 6a; Cooke, 1926a, p. 257, pl. 93, fig. 7; Semmes, 1929, fig. 51-7; Gardner, 1935, p. 125, pl. 7, fig. 5; Brann and Kent, 1960, p. 294

*Arca* (*Cucullaearca*) *macrodonta* (Whitfield), de Gregorio, 1890, p. 197, pl. 24, fig. 30 copy Whitfield

*Cucullaea* (*Latiara*) *macrodonta* Whitfield, Rutsch, 1943, p. 149

*Range*.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.; Matthews Ldg. beds (type), uppermost Porters Creek fm., upper Midway gr.

*Localities*.—ALA.: Wilcox Co., "9 mi. below Prairie Bluff" (type) = Matthews Ldg., *vide* Bowles, 1939, p. 300; Matthews Ldg., 9 mi. W. of Camden, sec. 12, T. 12 N., R. 6 E., Alabama R. TEXAS: see Gardner, 1935, p. 126

*Types*.—Syntypes (2), No. UC 24475 CNHM

*Cucullaea macrodonta* Whitfield, Harris, 1896 in part (Texas)

See *Cucullaea texana* Gardner

*Cucullaea macrodonta* Whitfield, Harris, 1894b (Arkansas); not Whitfield, 1865, p. 267

See *Cucullaea saffordi* (Gabb)

*Cucullaea onochela* Rogers and Rogers

See *Cucullaea (Latiarca) gigantea* Conrad

*Cucullaea rogersiana* Nyst

See *Cucullaea transversa* Rogers and Rogers

***Cucullaea saffordi* (Gabb)**

**Cucullaeidae**

*Arca Saffordii* Gabb, 1860d, p. 397, pl. 68, fig. 38 (not fig. 37 as in text); ? I. Lea, 1861, p. 150

*Cucullaea macrodonta* Whitfield, Harris, 1894b, p. 41 *vide* Harris, 1896, p. 51

*Cucullaea transversa* Rogers, Aldrich, 1894b, p. 242

*Cucullaea saffordi* (Gabb), Harris, 1896, p. 51, pl. 3, fig. 11 copy Gabb; pl. 4, fig. 2; Dall, 1898b, p. 603; Gardner, 1935, p. 128; Brann and Kent, 1960, p. 294

*Range*.—Paleocene, Midway gr. (type)

*Localities*.—TENN.: *Hardeman Co.*, (type); Hannah's; Huddleston's; Middleton

*Type*.—Lost *vide* Harris

*Cucullaea saffordi* (Gabb), Harris, 1896 in part

See *Cucullaea texana* Gardner

***Cucullaea saffordi* (Gabb) "var."**

**Cucullaeidae**

*Cucullaea saffordi* (Gabb) "var." Harris, 1896, p. 52, pl. 4, fig. 1; Brann and Kent, 1960, p. 294

*Range*.—Paleocene. Midway gr.

*Locality*.—ALA.: *Wilcox Co.*, Hamburg between Oak Hill and Allentown

*Type*.—Figured specimen, No. 32 PRI

***Cucullaea texana* Gardner**

**Cucullaeidae**

*Cucullaea macrodonta* Whitfield, Harris, 1896, p. 51 in part

*Cucullaea safford* Gabb, Harris, 1896, p. 51 in part

*Cucullaea (macrodonta* subsp.?) *texana* Gardner, 1923, p. 111, pl. 29, figs. 4, 5

*Cucullaea texana* Gardner, Trowbridge, 1932, p. 35, pl. 30, figs. 1, 2 copy Gardner; Gardner, 1935, p. 127, pl. 7, figs. 6, 7

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.

*Localities*.—TEXAS: *Maverick Co.*, White Bluff on Rio Grande land of Indio Cattle Co. about 4½ mi. W. of S. of Jacal ranch house USGS Sta. 6575 (type). For further localities in Kaufman, Travis, Medina, Uvalde, and Maverick Cos., see Gardner, 1923, pp. 111, 112; 1935, p. 128

*Type*.—Holotype, No. 352267 USNM

***Cucullaea transversa* Rogers and Rogers**

**Cucullaeidae**

*Cucullaea transversa* Rogers and Rogers, 1839b, p. 373, pl. 29, fig. 1 (reprint, 1884, p. 670, pl. 4, fig. 1); H. C. Lea, 1849, p. 98; ? Cossmann, 1893, p. 17; Dall, 1898b, p. 603; not Cooke, 1926a, pl. 94, fig. 8; Rutsch, 1943, p. 150. Not *C. transversa* Gabb, 1862a = re-named *C. gabbi* Johnson, 1905 Cretaceous

- Arca* (C.) *Rogersiana* Nyst, 1848, p. 62  
*Trigonarca* (*Latiarca*) *transversa* (Rogers and Rogers), Conrad, 1863a, p. 289  
*Latiarca transversa* (Rogers and Rogers), Conrad, 1865a, p. 12; Conrad, 1866a, p. 4  
*Arca rogersi* Heilprin, 1882b, p. 449 new name for *Arca* (*Cucullaea*) *transversa* Rogers and Rogers. Not *Arca transversa* Say, 1822, p. 269  
*Arca* (*Cucullaearca*) *transversa* (Rogers and Rogers), de Gregorio, 1890, p. 196 in part not pl. 25, figs. 1a, 1b  
*Cucullaea gigantea* Conrad, Clark and Martin, 1901, p. 196 in part  
     Range.—Lower Eocene. Nanjemoy fm. (type)  
     Localities.—VA.: *King George Co.*, near Potomac R. (type); *Woodstock. MD.*: *Charles Co.*, Popes Cr.; *Prince Georges Co.*, Thrift (well)  
     Type.—Probably MCZ (Cushman, 1907, p. 264)  
*Cucullaea transversa* Rogers and Rogers, Aldrich, 1886; Harris 1894a; Cooke, 1926a  
     See *Cucullaea gigantea* Conrad var.  
*Cucullaea transversa* Rogers and Rogers, Aldrich, 1894b  
     See *Cucullaea saffordi* (Gabb)

**Cucullaea vulgaris** Morton**Cucullaeidae**

- Cucullaea vulgaris* Morton, 1830a, p. 285, pl. 3, fig. 21; Johnson, 1905, p. 8; Weller, 1907, p. 397, pl. 32, figs. 5, 6; Richards, in Richards, et al., 1958, p. 75, pl. 13, fig. 3 (type ?), 5 see for synonymy, type discussion, and age  
*Idonearca medians* Whitfield, 1885, p. 199, pl. 26, figs. 5, 6; Whitfield, 1899, p. 158 = *C. vulgaris* Morton *vide* Weller, p. 399  
     Range.—Upper Cretaceous (type). Paleocene. Hornerstown fm.  
     Localities.—N.J.: *Burlington Co.*, "Crosswicks ?" (type); *Birmingham*; *Ocean Co.*, New Egypt; *Gloucester Co.*, Sewell  
     Types.—Syntypes, No. 19568 ANSP

**Cucullaearca** Conrad, 1865a**Arcidae**

- Type designation *C. lima* Conrad, 1848b, [designated by] Stoliczka, 1871 = *C. cuculoides* (Conrad), 1833  
*Cucullaearca cuculoides* (Conrad)  
     See *Barbatia cuculoides* (Conrad)  
*Cucullaearca lima* (Conrad)  
     See *Barbatia cuculoides* (Conrad)  
*Cucullaearca cuculoides* (Conrad)  
     See *Barbatia* (*Cucullaearca*) *cuculoides* (Conrad)

**Cf. Cucullaria aldrichi** Dall**Parallelodontidae**

- Barbatia* (*Cucullaria*) *Aldrichi* Dall, 1898b, p. 630, pl. 32, fig. 19; Schuchert, et al., 1905, p. 89  
*Arca Aldrichi* (Dall), Sheldon, 1917, p. 23, pl. 5, fig. 5 copy Dall; Harris, 1919, p. 55, pl. 22, fig. 20 copy Dall  
*Cucullaria* ? *aldrichi* Dall, Stewart, 1930, p. 66  
     Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.  
     Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)  
     Type.—Holotype, No. 116004 USNM



**Cucullaria ozarkensis** Aldrich**Parallelodontidae**

*Arca* (*Cucullaria*) *ozarkensis* Aldrich, 1921, p. 22, pl. 3, figs. 13, 14

*Range*.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Dale Co., Ozark (type)

*Type*.—Holotype, No. 35 GSATC

**Cultellus (Ensiculus) conradi** Cossmann**Solenidae**

*Ensiculus Conradi* Cossmann, 1893, p. 5, pl. 1, fig. 1

*Cultellus* (*Ensiculus*) *Conradi* Cossmann, Dall, 1900, p. 958; Harris, 1919, p. 195, pl. 59, fig. 3 copy Cossmann

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 11508 Lab. Géol., Sorbonne, Paris

**Cumingia ? keittensis** Harris**Semelidae**

*Cumingia* ? *keittensis* Harris, 1919, p. 173, pl. 52, figs. 14, 15; pl. 53, fig. 1

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S. C.: Calhoun Co., Keitt's Ravine [Kitts], 4.5 mi. NW. of Creston (type)

*Types*.—Syntypes, No. 559284 USNM

**Cuna ? astartoides** Harris**Crassatellidae**

*Cuna* ? *astartoides* Harris, 1919, p. 94, pl. 32, figs. 21, 21a; Brann and Kent, 1960, p. 294

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: Clarke Co., Wautubbee (type)

*Type*.—Holotype, No. 698 PRI

**Cuna monroensis** (Meyer)**Crassatellidae**

*Astarte Monroensis* Meyer, 1887a, p. 10, pl. 2, fig. 6; de Gregorio, 1890, p. 201, pl. 27, figs. 32, 33 copies Meyer; Cossmann, 1893, p. 13 under *Micromeris parva*; Dall, 1903a, p. 1481 listed in synonymy under *Crassatellites* (*Cuna*) *parvus* Lea

*Cuna monroensis* (Meyer), Harris, 1919, p. 94, pl. 32, figs. 22, 23 (copy Meyer)

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes, Nos. 638885, 638886 USNM

**Cuna parva** (Lea)**Crassatellidae**

*Astarte parva*, Lea, 1833, p. 63, pl. 2, fig. 37; H. C. Lea, 1849, p. 96; Conrad, 1865a, p. 9; Harris, 1895b, p. 32

*Micromeris parva* (Lea), Conrad, 1866a, p. 5; Cossmann, 1893, p. 13 includes *Astarte subparva* Meyer

*Astarte* (*Micromeris*) *subparva* Meyer, 1887a, p. 11, pl. 2, fig. 5; de Gregorio, 1890, p. 201, pl. 27, fig. 20 copy Meyer

*Astarte* (*Micromeris*) *parva* Lea, de Gregorio, 1890, p. 200, pl. 27, fig. 31 copy Lea

*Crassatellites (Cuna) parva* (Lea), Dall, 1903a, p. 1480 includes *Astarte subparva* Meyer  
*Cuna parva* (Lea), Harris, 1919, p. 93, pl. 32, figs. 18a-e; Brann and Kent, 1960, pp. 294, 295  
*Cuna* var. *subparva* (Meyer), Harris, 1919, p. 93, pl. 32, fig. 19 copy Meyer

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes, No. 5223, rt. valve lost [*vide* Harris, 1919, p. 93] ANSP; *Astarte subparva* Meyer, No. 638887 USNM

***Cuna parva fimbriata* Harris**

**Crassatellidae**

*Cuna parva fimbriata* Harris, 1919, p. 94, pl. 32, figs. 20, 20a; Brann and Kent, 1960, p. 295

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 697 PRI

*Cuna* var. *subparva* (Meyer)

See *Cuna parva* (Lea)

***Cuspidaria aequivalvis* (Whitfield)**

**Cuspidariidae**

"*Neaera aequivalvis*" Whitfield, 1885, p. 240, pl. 30, figs. 20, 21; Whitfield, 1899, p. 161

*Cuspidaria aequivalvis* (Whitfield), Dall, 1903a, p. 1505

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N. J.: Monmouth Co., Shark R. (type)

*Type*.—Holotype, AMNH

*Cuspidaria alternata* (Aldrich), Cossmann, 1893; Dall, 1903a

See *Cuspidaria attenuata* (Aldrich)

***Cuspidaria attenuata* (Aldrich)**

**Cuspidariidae**

*Neaera alternata* Aldrich, 1886, p. 38 (pl. 6, fig. 15 as *attenuata lapsus pennae*). Not *Neaera alternata* (d'Orbigny), Gabb, 1873, p. 248

*Corbula (Neaera) alternata* (Aldrich), de Gregorio, 1890, p. 232, pl. 37, fig. 20 copy Aldrich

*Cuspidaria alternata* (Aldrich), Cossmann, 1893, p. 7

*Cuspidaria attenuata* (Aldrich), Dall, 1903a, p. 1505 not "Meyer and Aldrich"; Harris, 1919, p. 184, pl. 55, fig. 21 copy Aldrich

Dall, 1903a, p. 1505 stated that *Neaera alternata* Aldrich, 1886, was preoccupied by a "*Neaera alternata* (Orb.) Gabb" and therefore, the *lapsus* of Aldrich, pl. 6, fig. 15 expl. as *attenuata* could be utilized as the substitute name. This appears to be a feasible method of settlement of the problem. D'Orbigny did not use *Neaera alternata*. His original name was *Sphena alternata* d'Orbigny, 1845c, p. 324, Recent, Gabb, 1873, p. 248 identified the Miocene fossil as the Recent and placed the species in *Neaera* which is the incident Dall referred to. The species was not an original name of Gabb. Maury, 1917, p. 196 renamed the identification of the Miocene species, *Cuspidaria islahispaniola*. *Sphena alternata* d'Orbigny, 1845c is identified as *Cuspidaria alternata* (d'Orbigny) which would make *C. alternata* (Aldrich) a secondary homonym of *C. alternata*

(d'Orbigny). McLean, 1951 (p. 49), listed *C. alternata* d'Orbigny as synonymous with *C. costellata* (Deshayes) in Bory (not 1837 as in McLean), 1833, p. 86. The solution for *Cuspidaria alternata* (Aldrich) would be to follow Dall and employ the specific name *attenuata*.

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638797 USNM

#### **Cuspidaria multiornata** (Meyer and Aldrich)

#### **Cuspidariidae**

*Neaera* (*Cardiomya*) *multiornata* Meyer and Aldrich, 1886, p. 46, pl. 2, fig. 19

*Cuspidaria multiornata* (Meyer and Aldrich), Dall, 1903a, p. 1505 probably a *Cardiomya*

*Cuspidaria prima* var. *multiornata* (Meyer and Aldrich), Harris, 1919, p. 183, pl. 55, figs. 18 copy of type, 19, 20; Brann and Kent, 1960, p. 296

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: Clarke Co., Wautubbee (type). LA.: Winn Par., St. Maurice (Harris)

*Type*.—Holotype, No. 638747 USNM

#### **Cuspidaria prima** (Aldrich)

#### **Cuspidariidae**

*Neaera prima* Aldrich, 1886, p. 38, pl. 6, fig. 14

*Cuspidaria prima* (Aldrich), Cossmann, 1893, p. 7; Harris, 1897b, p. 74, pl. 14, fig. 14; Harris, 1919, p. 183, pl. 55, fig. 17 copy Aldrich

*Corbula* (*Neaera*) *prima* (Aldrich), de Gregorio, 1890, p. 233, pl. 37, fig. 19 copy Aldrich

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

*Type*.—Specimen USNM labelled type but is not the specimen figured by Aldrich *vide* D. Wilson (pers. com. June 16, 1962)

*Cuspidaria prima multiornata* (Meyer and Aldrich)

See *Cuspidaria multiornata* (Meyer and Aldrich)

*Cyclas alveata* (Conrad)

See *Linga* (*Cavilinga*) *pomilia alveata* (Conrad)

*Cyclas carinifera* (Conrad)

See *Linga carinifera* (Conrad)

*Cyclas claibornensis* Conrad

See *Saxolucina* (*Plastomiltha*) *claibornensis* (Conrad)

*Cyclas curta* Conrad

See *Myrtea* ? *curta* (Conrad)

*Cyclas dolabra* (Conrad)

See *Lucina* (*Recurvella*) *dolabra* Conrad

*Cyclas impressa* (Lea)

See *Linga* (*Cavilinga*) *pomilia* (Conrad)

*Cyclas modesta* Conrad

See *Lucina* (*Callucina*) *papyracea* Lea

- Cyclās pandata* (Conrad)  
See *Eomiltha pandata* (Conrad)
- Cyclas papyracea* (Lea)  
See *Lucina (Callucina) papyracea* Lea
- Cyclas pomilia* (Conrad)  
See *Linga (Cavilinga) pomilia* (Conrad)
- Cyclas subvexa* Conrad  
See *Eophysema subvexa* (Conrad)
- Cyclas symmetrica* (Conrad)  
See *Epilucina rotunda* (Lea)
- Cyprina morrisii* Conrad 1865f. Not J. de C. Sowerby, 1841  
See *Pitar ovalis* (Whitfield)
- Cytherea aequorea* Conrad  
See *Callista (Costacallista) aequorea* (Conrad)
- Cytherea aequorea* mut. *cominduta* de Gregorio  
See *Callista (Costacallista) aequorea* (Conrad)
- Cytherea aequorea* mut. *comis* Lea, de Gregorio  
See *Callista (Callista) perovata* (Conrad)
- Cytherea aequorea* mut. *Hydii* Lea, de Gregorio  
See *Callista (Costacallista) aequorea* (Conrad)
- Cytherea aequorea* var. *mortoni* Conrad  
See *Callista (Costacallista) mortoni* (Conrad)
- Cytherea aequorea* mut. *subvitrea* de Gregorio  
See *Callista (Callista) perovata subvitrea* (de Gregorio)
- "*Cytherea albarea* [sic] Say", Tuomey, 1858, p. 265 = sp. Not *Cytherea albaria* Say, 1830, pl. 59, figs. 1, 2 = Miocene [*Callista albaria* (Say)]
- Cytherea comis* Lea  
See *Callista (Callista) perovata* (Conrad)
- Cytherea discoidalis* Conrad, 1833b, p. 37  
See *Rhabdopitaria discoidalis* (Conrad)
- Cytherea (Dione) discoidalis* Conrad, Heilprin, 1891a  
See under *Katherinella* ? *trigoniata bastropensis* (Harris)
- Cytherea eversa* Conrad  
See *Pitar eversus* (Conrad)
- Cytherea eversa* Conrad, Tuomey, 1858, p. 271  
See *Dosiniopsis lenticularis* (Rogers and Rogers)
- Cytherea (Caryatis) exigua* (Conrad)  
See *Pitar* ? *exiguus* (Conrad)
- Cytherea globosa* Lea  
See *Pitar poulsoni* (Conrad)
- Cytherea hatchetigbeensis* Aldrich  
See *Pelecypora hatchetigbeensis* (Aldrich)

- Cytherea hydana* Conrad  
See *Gratchupia* (*Cytheriopsis*) *hydana* (Conrad)
- Cytherea Hydii* Lea  
See *Callista* (*Costacallista*) *aequorea* (Conrad)
- Cytherea jacksonensis* Meyer, 1885a, pp. 461, 467 *nomen nudum*;  
Palmer, 1927, p. 214
- Cytherea lenis* (Conrad)  
See *Pitar lenis* (Conrad)
- Cytherea lenticularis* Rogers and Rogers  
See *Dosiniopsis lenticularis* (Rogers and Rogers)
- Cytherea liciata* Conrad  
See *Pitar* (*Pitar*) *ovatus* (Rogers and Rogers)
- Cytherea mccordia* Ruffin *nomen nudum*; Tuomey, 1848, p. 154;  
Harris, 1919, p. 201
- Cytherea minima* Lea  
See *Katherinella trigoniata* (Lea)
- Cytherea minima* Lea, Aldrich, 1886, p. 53; Palmer, 1927, p. 214  
not Lea, 1833  
See *Pitar* (*Pitar*) *nuttalliopsis* (Heilprin)
- Cytherea mortoni* Conrad  
See *Callista* (*Costacallista*) *mortoni* (Conrad)
- Cytherea nuttali* Conrad  
See *Pitar* (*Pitar*) *nuttali* (Conrad)
- ? *Cytherea nuttali* Conrad, 1857, p. 162, pl. 4, fig. 5; (Not Conrad, 1834)  
See *Katherinella* ? *trigoniata bastropensis* (Harris)
- Cytherea nuttalli* Conrad, Heilprin, 1891a. Not Conrad, 1834  
See *Katherinella*? *trigoniata bastropensis* (Harris)
- Cytherea nuttalliopsis* Heilprin  
See *Pitar* (*Pitar*) *nuttalliopsis* (Heilprin)
- Cytherea ovata* Rogers and Rogers  
See *Pitar* (*Pitar*) *ovatus* (Rogers and Rogers)
- Cytherea ovata* Rogers and Rogers, Clark  
See *Pitar* (*Pitar*) *pyga* (Conrad)  
See also *Pitar* (*Pitar*) *ovatus* (Rogers and Rogers)
- Cytherea ovata pyga* Conrad  
See *Pitar* (*Pitar*) *pyga* (Conrad)
- Cytherea perovata* Conrad  
See *Callista* (*Callista*) *perovata* (Conrad)
- Cytherea perovata*? Conrad, Aldrich, 1886, p. 53  
See *Macrocallista sylvaerupis* (Harris)
- Cytherea poulsoni* Conrad  
See *Pitar poulsoni* (Conrad)



*Cytherea pyga* ConradSee *Pitar (Pitar) pyga* (Conrad)*Cytherea Sayana* Conrad, Tuomey, 1858, pp. 265, 274Not *Cytherea Sayana* Conrad, 1833a, p. 345 or Conrad, 1834, p. 124 or Conrad, 1838, p. 13 = Miocene-Pleistocene*Cytherea subcrassus* LeaSee *Rhabdopitaria subcrassus* (Lea)*Cytherea subimpressa* ConradSee *Macrocallista subimpressa* (Conrad)*Cytherea texacola* (Harris)See *Pitar (Calpitaria) tornadonis* (Harris)*Cytherea tornadonis* (Harris)See *Pitar (Calpitaria) tornadonis* (Harris)*Cytherea trigoniata* LeaSee *Katherinella trigoniata* (Lea)See also *Rhadopitaria discoidalis* (Conrad) in part*Cytherea trigoniata subcrassa* LeaSee *Rhabdopitaria subcrassa* (Lea)*Cytherea* sp.See *Pitar* sp.**"Cytherea (Dosiniopsis ?)" sp.****Veneridae***Cytherea (Dosiniopsis ?)* sp. Harris, 1894b, p. 44, pl. 1, fig. 5*Range*.—Paleocene. Clayton fm., lower Midway gr.*Localities*.—ARK.: *Pulaski Co.*, two mi. n. of Bradford; Fourche Cr., near mouth Crooked Cr., near Alexander (Harris, pp. 28, 44)*Type*.—Figured specimen (USNM, 1894)*Cytheriopsis hydana* (Conrad)See *Gratelupia (Cytheriopsis) hydana* (Conrad)*Dione aequorea* (Conrad)See *Callista (Costacallista) aequorea* (Conrad)*Dione annexa* ConradSee *Callista (Callista) annexa* (Conrad)*Dione Delawarensis* Gabb, 1860a, p. 302 is Cretaceous. N. J., Delaware*Dione discoidalis* Conrad, 1865a, p. 6See *Katherinella trigoniata* (Lea)*Dione eversa* (Conrad)See *Pitar eversus* (Conrad)*Dione lenis* (Conrad)See *Pitar lenis* (Conrad)*Dione liciata* (Conrad)See *Pitar (Pitar) ovatus* (Rogers and Rogers)*Dione mortoni* (Conrad)See *Callista (Costacallista) mortoni* (Conrad)

*Dione nuttali* (Conrad)

See *Pitar* (*Pitar*) *nuttali* (Conrad)

*Dione ovata* (Rogers and Rogers)

See *Pitar* (*Pitar*) *ovatus* (Rogers and Rogers)

*Dione perovata* (Conrad)

See *Callista* (*Callista*) *perovata* (Conrad)

*Dione poulsoni* (Conrad)

See *Pitar* *poulsoni* (Conrad)

*Dione pyga* (Conrad)

See *Pitar* (*Pitar*) *pyga* (Conrad)

*Dione securiformis* Conrad

See *Pitar* (*Pitar*) *securiformis* (Conrad)

*Dione subimpressa* (Conrad)

See *Macrocallista subimpressa* (Conrad)

*Diplodonta anteproducta* (Harris)

See *Timothygnus anteproductus* (Harris)

*Diplodonta astariformis* Conrad

See *Diplodonta* (*Diplodonta*) *ungulina* (Conrad)

*Diplodonta* (*Timothygnus*) *bulla* (Conrad)

See *Timothygnus bulla* (Conrad)

#### **Diplodonta** (**Diplodonta**) **corbiscula** Harris

#### **Diplodontidae**

*Diplodonta corbiscula* Harris, 1919, p. 130, pl. 40, figs. 20, 21 21a; Stenzel, Krause, and Twining, 1957, p. 117; Brann and Kent, 1960, p. 330

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 1138 PRI

*Diplodonta* (*Timothygnus*) *deflata* Harris

See *Timothygnus deflatus* Harris

*Diplodonta deltoidea* Conrad

See *Diplodonta unguina* (Conrad)

#### **Diplodonta** (**Diplodonta**) **hopkinsensis** Clark

#### **Diplodontidae**

*Diplodonta hopkinsensis* Clark, 1895, p. 5; Clark, 1896, p. 79, pl. 22, figs. 1a-d; Dall, 1900, p. 1181; Clark and Martin, 1901, p. 174, pl. 36, figs. 5, 5a, 6 copy Clark

"*Sphaerella* sp." Harris, 1897b, p. 65, pl. 13, fig. 6 [*fide* Harris writing in PRI copy of Dall, 1900, p. 1182]; Brann and Kent, 1960, p. 806

*Taras hopkinsensis* (Clark), Shimer and Shrock, 1944, p. 423, pl. 168, figs. 31, 32 copy Clark and Martin

*Diplodonta* (*Diplodonta*) *hopkinsiensis* [*sic*] Clark, Stenzel, Krause, and Twining, 1957, p. 117

*Range*.—Lower Eocene. Nanjemoy fm. (type); Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—VA.: Prince George Co., Evergreen (type). ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R. Clarke Co., Woods Bluff, Tombigbee R.; Thomasville  
*Type*.—Holotype, USNM

**Diplodonta (Diplodonta) inflata (Lea)**

**Diplodontidae**

*Egeria inflata* Lea, 1833, p. 50, pl. 1, fig. 18; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 23

*Mysia inflata* (Lea), Conrad, App. in Morton, 1834, p. 7; Cossmann, 1893, p. 11

*Diplodonta inflata* (Lea), Conrad, 1858b, p. 166; Dall, 1900, p. 1182; Harris, 1919, p. 129 in part, pl. 40, figs. 17-19; Brann and Kent, 1960,

*Sphaerella inflata* (Lea), Conrad, 1865a, p. 9; Conrad, 1866a, p. 6 p. 330

*Sphaerella levis* Conrad, 1865a, p. 9; Conrad, 1866a, p. 6

*Mysia levis* (Conrad), Conrad, 1865c, p. 147; Harris, 1895b, p. 23 = *Egeria inflata* Lea

*Lucina* (*Sphaerella*) *inflata* (Lea) and var. *paruminflata* de Gregorio, 1890, p. 207, pl. 29, fig. 13 copy Lea; figs. 15-17

*Spherella* [sic] *levis* Conrad, de Gregorio, 1890, p. 207

Not *Diplodonta* sp. Harris, 1897b, p. 65, pl. 13, fig. 7; not Brann and Kent, 1960, p. 331

*Diplodonta* (*Diplodonta*) *inflata* (Lea), Stenzel, Krause, and Twinning, 1957, p. 117

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). LA.: Winn Par., Winnfield; Marble Quarry (Harris)

*Types*.—Holotype, No. 5088 (Lea Coll.), ANSP. Type *Lucina* (*Sphaerella*) *inflata* var. *paruminflata* de Gregorio, formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost. *Sphaerella levis* Conrad (3 possible syntypes), No. 30697 ANSP Moore, 1962, p. 69

**Diplodonta (Diplodonta) marlboroensis Clark and Martin** **Diplodontidae**

*Diplodonta marlboroensis* Clark and Martin, 1901, p. 173, pl. 36, fig. 4

*Diplodonta* (*Diplodonta*) *marlboroensis* Clark and Martin, Stenzel, Krause, and Twining, 1957, p. 117

*Range*.—Paleocene. Aquia fm. (type)

*Localities*.—MD.: Prince Georges Co., Upper Marlboro (type); Anne Arundel Co., Sheckel's Farm near South River

*Type*.—Holotype, USNM

*Diplodonta* (*Felaniella*) *nana* (Lea)

See *Microstagon nana* (Lea)

**Diplodonta (Diplodonta) petropolitana Stenzel**

**Diplodontidae**

*Diplodonta* (*Diplodonta*) *petropolitana* Stenzel in Stenzel, Krause, and Twining, 1957, p. 117, pl. 9, figs. 3, 4 and text fig. 18

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: Burleson Co., Stone City Bluff (type), Brazos R.

*Types*.—Holotype, No. 20564 BEG (figs. 3, 4); paratypes, Nos. 20752-20755 BEG (9 specimens unfigured)

**Diplodonta (Diplodonta) satex** Gardner**Diplodontidae**

*Diplodonta satex* Gardner, 1927, p. 373, [pl. 4], figs. 34, 35

*Diplodonta (Diplodonta) satex* Gardner, Stenzel, Krause, and Twining, 1957, p. 117

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—TEXAS; Anderson Co.,  $\frac{3}{4}$  mi. S. of Elkart (type)

*Type*.—Holotype, No. 369234, USNM

*Diplodonta turgida* Dall, 1900, in part not *Sphaerella turgida* Conrad (= Oligocene)

See *Timothyus anteproductus* (Harris)

See also *Timothyus bulla* (Conrad)

**Diplodonta (Diplodonta) unguina** (Conrad)**Diplodontidae**

*Astarte unguina* Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 7 = *Mysia*; H. C. Lea, 1849, p. 96; Harris, 1895b, p. 47

*Egeria rotunda* Lea, 1833, p. 50, pl. 1, fig. 17; Conrad, App. in Morton, 1834, p. 7 = *Mysia unguina*; H. C. Lea, 1849, p. 99; Tuomey, 1858, pp. 265, 274; Harris, 1895b, p. 39

*Mysia unguina* (Conrad), Conrad, App. in Morton, 1834, p. 7; Conrad, 1865a, p. 9; Cossmann, 1893, p. 11

*Diplodonta unguina* (Conrad), Conrad, 1858b, p. 166; de Gregorio, 1890, p. 208 in part pl. 29, fig. 18 copy *rotunda* Lea; figs. 19-28; pl. 30, figs. 1-9; Dall, 1900, pp. 1015, 1181 in part; Harris, 1919, p. 127, pl. 40, figs. 10-14; Harris and Palmer, 1946, p. 85, pl. 19, figs. 11, 11a; Brann and Kent, 1960, p. 331

*Diplodonta astariformis* Conrad, 1860, p. 296; Harris, 1895b, p. 6

*Diplodonta deltoidea* Conrad, 1860, p. 296; Harris, 1895b, p. 15

*Mysia astartiformis* (Conrad), Conrad, 1865a, p. 9 *astartaeformis*; Conrad, 1865c, p. 147, pl. 11, fig. 15; de Gregorio, 1890, p. 209, pl. 30, fig. 12 copy Conrad

*Mysia deltoidea* (Conrad), Conrad, 1865a, p. 9; Conrad, 1865c, p. 147, pl. 11, fig. 10; de Gregorio, 1890, p. 209, pl. 30, fig. 11 copy Conrad

*Diplodonta (Diplodonta) unguina* (Conrad), Stenzel, Krause, and Twining, 1957, p. 118

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr. (Harris); Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type); Lisbon Bluff, Alabama R. (Harris); Clarke Co., Gosport [Bluff], Alabama R.

*Types*.—Probable syntypes (9), *Astarte unguina*, No. 30564 ANSP. *Diplodonta deltoidea* missing. *Diplodonta astartiformis* missing, Moore, 1962, pp. 106, 53, 41 respectively

*Diplodonta unguina* (Conrad), de Gregorio, 1890 in part

See *Microstagon nana* (Lea)

**Diplodonta (Diplodonta) unguina yazoocola** Harris**Diplodontidae**

*Diplodonta unguina yazoocola* Harris in Harris and Palmer, 1946, p. 85, pl. 19, figs. 9, 10, 10a; Brann and Kent, 1960, p. 331

*Diplodonta (Diplodonta) unguina yazoocola* Harris, Stenzel, Krause, and Twining, 1957, p. 118

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: Yazoo Co., Sims Siding, 8 mi. N. of Yazoo City (type)

*Types*.—Syntypes, Nos. 4317, 4318, PRI

**Diplodonta sp.**

**Diplodontidae**

*Diplodonta* sp., Gardner, 1935, p. 176

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: Medina Co., USGS sta. 11769, 5.7 mi. NW. Castroville, Quihi road

*Type*.—Unfigured specimen probably USNM

**Diplodonta (?) sp.**

**Diplodontidae**

*Diplodonta* sp. Gardner, 1935, p. 176; Stenzel, Krause, and Twining, 1957, p. 117

*Range*.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: Medina Co., USGS 17769, 5.7 mi. NW. of Castroville on the Quihi road

*Type*.—Unfigured specimen not seen. Presumably USNM

**Diplodonta sp.**

**Diplodontidae**

*Diplodonta* sp. Harris, 1897b, p. 65, pl. 13, fig. 7; Brann and Kent, 1960, p. 331

*Range*.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.

*Type*.—Figured specimen, No. 175 PRI

**Divaricella robertsi Richards**

**Lucinidae**

*Divaricella robertsi* Richards in Richards and Palmer, 1953, p. 49, pl. 9, fig. 7

*Range*.—Upper Eocene. Inglis fm. (type), lower Ocala gr.

*Locality*.—FLA.: Levy Co., road metal pit 2.9 mi. S. of N. limits of town of Gulf Hammock, just SW. of State Road 55, SW. ¼ sec. 34, T. 14 S., R. 16 E. (type)

*Type*.—Holotype, No. I-7567 Fla. Geol. Sur.

**Donax acutangula Aldrich**

**Donacidae**

*Donax acutangula* Aldrich, 1921, p. 22, pl. 3, fig. 12

*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

*Type*.—Holotype, No. 47 GSATC

*Donax (Egerella) donacea* (Conrad)

See *Egerella limatula* (Conrad)

*Donax fragilis* Conrad *nomen nudum* Conrad, App. in Morton, 1834, p. 7; d'Orbigny, 1850, p. 378; Dall, 1900, p. 964 as *Egerella*

*Donax limatula* Conrad

See *Egerella limatula* (Conrad)

See also *Egerella subtrigonia* (Lea)



*Donax plana* (Lea), de Gregorio, 1890

See *Tellina leana* Dall

See also *Tellina* (*Angulus*) *plana* (Lea)

*Donax* (*Egerella*) *veneriformis* (Lea)

See *Egerella subtrigonia* (Lea)

*Donax* (*Egerella*) *veneriformis tiga* de Gregorio

See *Egerella limatula* (Conrad)

*Dosinia lenticularis* (Rogers and Rogers)

See *Dosiniopsis lenticularis* (Rogers and Rogers)

*Dosinia mercenaroidea* Aldrich

See *Mercimonia* ? *mercenaroidea* (Aldrich)

*Dosiniopsis* (*Pelecypora*) *hatchetigbeensis* (Aldrich)

See *Pelecypora hatchetigbeensis* (Aldrich)

### **Dosiniopsis lenticularis** (Rogers and Rogers)

### **Veneridae**

*Cytherea lenticularis* Rogers and Rogers, 1839b, p. 372, pl. 28, fig. 1 (2 figs); Rogers reprint, 1884, p. 669, pl. 3, fig. 1 (2 figs.); H. C. Lea, 1849, p. 99 [not Conrad]

*Artemis lenticularis* [sic] (Rogers and Rogers), Conrad, 1853b, p. 320

*Meretrix lenticularis* (Rogers and Rogers) [not Conrad], Conrad, 1854, p. 30

*Dosinia lenticularis* (Rogers and Rogers), Conrad, 1854, p. 30

*Cytherea eversa* Conrad, Tuomey, 1858, p. 271; not *Cytherea eversa* Conrad, 1845b, p. 174

*Dosiniopsis lenticularis* (Rogers and Rogers), Conrad, 1864, p. 213; Conrad, 1865a, p. 6; Conrad, 1866a, p. 6; Conrad, 1866c, p. 100; Tryon, 1884b, p. 178, pl. 115, fig. 38; Aldrich, 1886, p. 57; Harris, 1894a, p. 302; Clark, 1895, p. 5; Clark, 1896, p. 78 includes *meekii*, pl. 18, figs. 1a-g; Harris, 1897b, p. 64, pl. 12, fig. 13; Clark and Martin, 1901, p. 171 includes *meekii*, pl. 32, figs. 1a-g; Dall, 1903a, p. 1225; Shimer and Shrock, 1944, p. 427, pl. 170, figs. 13-15 copy Clark and Martin; Palmer, 1927/1929, p. 6, pl. 1, figs. 3, 11, 16; Vokes, 1961, p. 50, pl. 10, figs. 7-9; Brann and Kent, 1960, p. 342

*Range*.—Paleocene. Aquia fm. (type). Lower Eocene. Middle Wilcox [Sabine] gr.

*Localities*.—VA.: "eastern Virginia." (type); *Stafford Co.*, Aquia Cr. MD.: *Prince Georges Co.*, Fort Washington; 1 mi. NE. of Piscataway; Brooks Estate near Seat Pleasant; Upper Marlboro; *Charles Co.*, Glymont; Clifton Beach; Liverpool Point; Mattawoman Creek; Reedy Run (branch of Chickomuxen Creek); 3 mi. W. of Pesgah; *Ann Arundel Co.*, Sheckel's Farm near South R., 1 mi. W. of Hardesty; *Kent Co.*, Harrison's Ldg., Chester R.; *Cecil Co.*, Fredericktown; [?] *Co.*, 1 mi. NE. of Grimesville. ALA.: *Monroe Co.*, Bells Ldg., Alabama R. GA.: *Clay Co.*, Fort Gaines

*Type*.—Holotype. Unknown

### **Dosiniopsis lenticularis meekii** Conrad

### **Veneridae**

*Dosiniopsis meekii* Conrad, 1864, p. 213, text fig.; Conrad, 1865a, p. 6; Conrad, 1866a, p. 6; Conrad, 1866c, p. 100; Dall, 1902, p. 345; Stewart, 1930, p. 251

*Dosiniopsis lenticularis meekii* Conrad, Harris, 1894a, p. 302; Dall, 1903a, p. 1225; Palmer, 1927/1929, p. 7, pl. 1, figs. 8, 10, 13, 14; Brann and Kent, 1960, p. 342

*Range*.—Paleocene. Aquia fm. (type)

*Locality*.—MD.: Prince Georges Co., 6 mi. E. of Washington, D. C. (type). VA.: Stafford Co., mouth of Potomac Creek

*Type*.—Missing ANSP Moore, 1962, p. 74

*Dosiniopsis meekii* Conrad

See *Dosiniopsis lenticularis meekii* Conrad

### **Eburneopecten calvatus (Morton)**

### **Amusiidae**

*Pecten calvatus* Morton, 1833b, p. 130, pl. 10, fig. 3; Morton, 1834, p. 58, pl. 10, fig. 3; Conrad, 1834, p. 122; Morton, 1842a, p. 216; Conrad, 1842b, p. 174; Ravenel, 1844, p. 97; Gibbes, 1845, p. 254; H. C. Lea, 1849, p. 103; Conrad, 1865a, p. 14; Hopkins, 1871, pp. 12, 17; Heilprin, 1882a, p. 416; Vaughan, 1896, p. 50; Harris, 1919, p. 28; Stenzel, Krause, and Twining, 1957, p. 85 under *Eburneopecten*

*Camptonectes calvatus* (Morton), Conrad, 1866a, p. 3

*Pecten (Pseudamussium) calvatus* Morton, de Gregorio, 1890, p. 181 in part, pl. 21, fig. 28 type; Dall, 1898b, p. 752 in part = *P. scintillatus corneoides* Harris, 1919 *fide* Harris, 1919, p. 28

*Pseudamussium calvatum* (Morton), Cossmann, 1893, p. 18

*Tariamussium ? calvatum* (Morton), Sacco, 1897c, p. 50

*Aequipecten (Cyclopecten) calvatus* (Morton), Teppner, 1922, p. 220

*Amussium (Pseudamussium) calvatus* (Morton), Tucker-Rowland, 1938, p. 64, pl. 4, figs. 26-28; pl. 6, fig. 7 type

*Range*.—Middle Eocene. Santee ls. (type), upper Claiborne gr. *fide* Cooke and MacNeil, 1952, p. 20

*Locality*.—S.C.: Orangeburg Co., Eutaw Springs (type)

*Type*.—Holotype (monotype), ANSP

### **Eburneopecten corneoides (Harris)**

### **Amusiidae**

Not *Pecten claibornensis* Harris, 1894b, p. 145

*Pseudamussium claibornense* Harris, 1897b, p. 43, pl. 7, fig. 1 not of Conrad, 1866a, p. 23 (as *Camptonectes*); Brann and Kent, 1960, p. 741

*Pecten scintillatus* var. *corneoides* Harris, 1919, p. 28, in part, not pl. 15, figs. 15, 16; Brann and Kent, 1960, p. 669 not p. 670 = *Eburneopecten* sp.

*Pecten (Pseudamussium) scintillatus* Conrad, Dall, 1898b, p. 753 in part

*Amussium (Pseudamussium) corneoides* (Harris), Tucker-Rowland, 1938, p. 65 in part, not pl. 5, fig. 13 not cotype; not pl. 6, fig. 11 not cotype

*Eburneopecten corneoides* (Harris), Stenzel, Krause, and Twining, 1957, p. 85

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: NE. Washington Co., Hatchetigbee Bluff, Tombigbee R. (type)

*Type*.—Holotype, No. 185 PRI

### **Eburneopecten dalli (Clark)**

### **Amusiidae**

*Pecten Rogersi* Clark, 1895, p. 5; Clark, 1896, p. 85, pl. 34, figs. 2a-c

*Pecten (Pseudamussium) frontalis* Dall, 1898b Apr., p. 753 [new name for *P. rogersi* Clark, not *P. Rogersi* Conrad, 1834] in part. Paleocene Chesapeake

*Pecten dalli* Clark, 1898 Nov., p. 18 new name, not *P. Rogersi* Conrad, 1834, p. 151; Clark and Martin, 1901, p. 188, pl. 44, figs. 7, 7a, 7b holotype

*Aequipecten* (*Pseudamussium*) *frontale* (Dall), Teppner, 1922, p. 210 in part. See *Eburneopecten frontalis* (Dall)

*Range*.—Paleocene. Aquia fm. (type). Lower Eocene. Nanjemoy fm. (Clark and Martin)

*Localities*.—VA.: *Stafford Co.*, Potomac Cr. (type); *King George Co.*, Woodstock; [?] *Co.*, "Front Royal". MD.: *Queen Annes Co.*, South East Creek (1 mi. above Chester R.); *Prince Georges Co.*, Upper Marlboro (deep cut near Chesapeake Beach R.R. Station)

*Type*.—Holotype, USNM

### ***Eburneopecten frontalis* (Dall)**

### **Amusiidae**

*Pecten* (*Pseudamussium*) *frontalis* Dall, 1898b Apr., p. 753, new name for *P. rogersi* Clark, 1896, p. 85; not *P. Rogersi* Conrad, 1834, p. 151; Schuchert, et al., 1905, p. 487

*Aequipecten* (*Pseudamussium*) *frontale* (Dall), Teppner,\* 1922, p. 210 in part

Because *E. frontalis* had the types designated from Garland Creek, Mississippi, Jackson Eocene, the best solution would be retain *E. dalli* (which see) for the Aquia Paleocene Virginia form.

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Locality*.—MISS.: *Clarke Co.*, Garland Creek near Shubuta (type)

*Types*.—Syntypes, No. 137832 USNM [not figured]

### ***Eburneopecten hamiltonensis* (Tucker)**

### **Amusiidae**

*Pecten* (*Chlamys*) *clarkeanus* Aldrich, Dall, 1898b, p. 739 in part *vide* Tucker, 1934, p. 617

*Pecten clarkeanus* Harris, 1919, p. 25 in part, pl. 15, figs. 10-12 var.; Brann and Kent, 1960, p. 659 in part Nos. 448, 449, 450 only

*Amusium* (*Pseudamussium*) *hamiltonensis* Tucker, 1934, p. 617, pl. 27, fig. 1; Tucker-Rowland, 1938, p. 63, pl. 5, fig. 17

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Hamilton Bluff, Alabama R. (type). MISS.: *Tallahatchie Co.* (*Talahatchee* [sic], Miss., Tucker)

*Types*.—Holotype, No. 449; paratypes, 448, 450 PRI

### ***Eburneopecten scintillatus* Conrad**

### **Amusiidae**

*Pecten* (*Eburneopecten*) *scintillatus* Conrad, 1865b, p. 140, pl. 10, fig. 4; Harris and Palmer, 1946, p. 33, pl. 9, figs. 1-8; Stenzel, Krause, and Twining, 1957, p. 84, pl. 7, figs. 16-21; pl. 10, fig. 8; Brann and Kent, 1960, p. 669; not p. 670 *P. scintillatus corneoides* "paratypes" equals *Eburneopecten* sp.

*Camptonectes scintillatus* (Conrad), Conrad, 1865a, p. 190+; Conrad, 1866a, p. 23

*Camptonectes claibornensis* Conrad, 1866a, p. 23 *nomen nudum*

*Pecten scintillatus* Conrad, Heilprin, 1882a, p. 417; Clark, Miller, Stephenson, Johnson, and Parker, 1912, pp. 188, 316; Harris, 1919, p. 28 in part, pl. 15, fig. 14 only; Brann and Kent, 1960, p. 668. Not Aldrich, 1886, pp. 9, 48; not de Gregorio, 1890, p. 183; not Deussen, 1924, p. 67

*Pecten claibornensis* (Conrad) [*nomen nudum*], Heilprin, 1882a, p. 416; de Gregorio, 1890, p. 182 *subgenus* *Camptonectes*; Harris, 1894b, p. 145; Harris, 1895b, p. 11; Harris, 1897a, p. 470, pl. 18, figs. 1, 2; Dall, 1898b, p. 753

Not *Pseudamussium claibornense* (Conrad), Harris, 1897b, p. 43, pl. 7, fig. 1

*Pecten* (*Pseudamussium* [*sic*]) *scintillatus* Conrad, Dall, 1898b, p. 752 in part; cf. Kellum, 1926, p. 19; cf. Harbison, 1944, pp. 3, 7, pl. 1, fig. 4

*Chlamys* (*Camptonectes*) *scintillatus* (Conrad), Teppner, 1922, p. 140 in part

*Amusium* (*Pseudamussium*) *scintillatus* (Conrad), Tucker-Rowland, 1938, p. 66 in part, pl. 5, fig. 12

*Amusium* (*Pseudamussium*) *corneoides* Harris, Tucker-Rowland, 1938, p. 65 in part

*Eburneopecten scintillatus* (Conrad), Gardner, 1939, p. 341

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Localities*.—MISS.: Clarke Co., "Enterprise"—Garland Cr. [Aldrich, 1885c, p. 307]; near Shubuta; Hinds Co., Jackson

*Types*.—Probable syntypes (2), No. 13231 ANSP Moore, 1962, p. 95

*Eburneopecten scintillatus* Conrad *s.l.*, Stenzel, Krause, and Twining, 1957, p. 85.

See *Eburneopecten* sp.

#### ***Eburneopecten subminutus* (Aldrich)**

#### **Amusiidae**

*Pecten* (*Pseudamussium*) *subminutus* Aldrich, 1903, p. 100, pl. 4, figs. 16, 17

*Amusium* (*Pseudamussium*) *subminutus* Aldrich, Tucker-Rowland, 1938, p. 67, pl. 6, fig. 16

*Range*.—Upper Eocene. Jackson gr. (Aldrich). Oligocene (type)

*Localities*.—MISS.: Hinds Co., Jackson (Aldrich); Wayne Co., Red Bluff [Hiwanee Station], Chickasawhay R. (type)

*Type*.—Holotype, No. 644632 USNM

#### ***Eburneopecten* sp.**

#### **Amusiidae**

*Pecten* (*Pseudamussium*) *scintillatus* Conrad, Dall, 1898b, p. 753 in part  
*Pecten scintillatus* var. *corneoides* Harris, 1919, p. 28 in part, pl. 15, figs. 15, 16; Renick and Stenzel, 1931, p. 104

*Pecten scintillatus* Conrad, Deussen, 1924, p. 67

*Amusium* (*Pseudamussium*) *corneoides* Harris, Tucker-Rowland, 1938, p. 65 in part, pl. 5, fig. 13 not cotype; pl. 6, fig. 11 not cotype

*Pecten scintillatus corneoides* Harris, Brann and Kent, 1960, p. 670, Nos. 453, 454

*Eburneopecten scintillatus* Conrad *s.l.*, Stenzel, Krause, and Twining, 1957, p. 85

*Range*.—Middle Eocene. Stone City beds, middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.

*Localities*.—LA.: Winn Par., St. Maurice. ALA.: Monroe Co., Claiborne Bluff (base), Alabama R. TEXAS: Brazos Co., Little Brazos R. MISS.: Clarke Co., Wautubbee

*Types*.—Figured specimens, Nos. 453, 454 PRI



*Egerella bucklandii* LeaSee *Egerella limatula* (Conrad)*Egerella fragilis* (Conrad)See *Donax fragilis* Conrad nomen nudum*Egerella plana* (Lea)See *Tellina (Angulus) plana* (Lea)***Egerella limatula* (Conrad)****Donacidae**

*Donax limatula* Conrad, 1833c Nov., p. 42 (Harris reprint, 1893, p. 68); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 378; Harris, 1895b, p. 24

*Egeria triangulata* Lea, 1833 Dec., p. 51, pl. 1, fig. 20; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 378 under *Donax limatula* Conrad; Harris, 1895b, p. 46

*Egeria Bucklandii* Lea, 1833 Dec., p. 52, pl. 1, fig. 21; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 378 under *Donax limatula* Conrad; Harris, 1895b, p. 8

*Egeria donacea* Conrad, 1865a, p. 5 (as *donacia*); Conrad, 1865c, p. 146, pl. 11, fig. 12; Conrad, 1866a, p. 7 (as *donacia*); Harris, 1895b, p. 16

*Egeria limatula* (Conrad), Conrad, 1865a, p. 5; Conrad, 1866a, p. 7

*Donax (Egerella) donacia [sic]* (Conrad), de Gregorio, 1890, p. 222, pl. 35, fig. 21 copy Conrad

? *Donax (Egerella) veneriformis* var. *tiga* de Gregorio, 1890, p. 222, pl. 35, figs. 4-9

*Donax (Egerella) limatula* Conrad, de Gregorio, 1890, p. 222 in part, pl. 35, fig. 18 copy Lea *triangulata*, fig. 20 copy Lea *Bucklandii*; p. 223 mut. *triangulata*, mut. *Bucklandii*

*Egerella triangulata* (Lea), Cossmann, 1893, p. 9; Dall, 1900, p. 964; Schuchert, et al., 1905, p. 241; Harris, 1919, p. 156, pl. 48, figs. 12, 13

*Psanmobia eborea* error for *Egerella triangulata* Lea, Brann and Kent, 1960, p. 740, No. 1208 PRI

**Range.**—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

**Locality.**—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

**Types.**—Syntypes (3), No. 30536 ANSP Moore, 1962, p. 70;

*Egeria donacea* Conrad, syntypes (2), No. 30698 ANSP Moore, 1962, p. 55; *Egeria triangulata* Lea, holotype, No. 5096 ANSP;

*Egeria bucklandii* Lea, holotype, No. 5097 ANSP

***Egerella subtrigonia* (Lea)****Donacidae**

*Egeria subtrigonia* Lea, 1833, p. 53, pl. 1, fig. 22; H. C. Lea, 1849, p. 99 *subtrigona*; Conrad, 1865a, p. 5; Conrad, 1866a, p. 7 *subtrigona*; Harris, 1895b, p. 44

*Egeria veneriformis* Lea, 1833, p. 53, pl. 1, fig. 23; H. C. Lea, 1849, p. 99; Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; Harris, 1895b, p. 47

*Donax (Egerella) veneriformis* (Lea), de Gregorio, 1890, p. 222, pl. 35, fig. 10 copy Lea

*Donax (Egerella) limatula* (Conrad), de Gregorio, 1890, p. 222 in part, pl. 35, fig. 19 copy Lea *subtrigonia*, p. 223 mut.

*Egerella subtrigonia* (Lea), Stoliczka, 1871, pp. xvii, 133 *subtrigona*; Tryon, 1884b, p. 173, pl. 112, fig. 90; Cossmann, 1893, p. 9 in part; Dall, 1900, p. 964; Harris, 1919, p. 157, pl. 48, figs. 14-16a; pl. 49, figs. 1, 2; Brann and Kent, 1960, pp. 352, 353



*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne  
gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5098 ANSP

*Egerella triangulata* (Lea)

See *Egerella limatula* (Conrad)

*Egeria Bucklandii* Lea

See *Egerella limatula* (Conrad)

*Egeria donacea* Conrad

See *Egerella limatula* (Conrad)

*Egeria inflata* Lea

See *Diplodonta inflata* (Lea)

*Egeria limatula* Conrad

See *Egerella limatula* (Conrad)

*Egeria nana* Lea

See *Microstagon nana* (Lea)

*Egeria nitens* Lea

See *Abra* (*Abra*) *nitens* (Lea)

*Egeria ovalis* Lea

See *Tellina leana* Dall

*Egeria plana* Lea

See *Tellina* (*Angulus*) *plana* (Lea)

*Egeria rotunda* Lea

See *Diplodonta unguina* (Conrad)

*Egeria subtrigonia* Lea

See *Egerella subtrigonia* (Lea)

*Egeria triangulata* Lea

See *Egerella limatula* (Conrad)

*Egeria veneriformis* Lea

See *Egerella subtrigonia* (Lea)

*Ensiculus Conradi* Cossmann

See *Cultellus* (*Ensiculus*) *conradi* (Cossmann)

*Entolium* (*Amussium*) *ocalanum* Dall

See *Amusium ocalanum* Dall

*Entolium* (*Propeamussium*) *squamulum* (Lamarck), Teppner

See *Amusium* (*Propeamussium*) *squamulum* (Lamarck)

## **Eomiltha pandata** (Conrad)

## **Lucinidae**

*Lucina pandata* Conrad, 1833a, p. 343; Conrad, 1833c, p. 40 (Harris reprint, 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 387; Tuomey, 1858, p. 266; Conrad, 1866a, p. 6; Harris, 1895b, p. 32; Harris, 1919, p. 121, pl. 39, figs. 6, 7, 7a; Brann and Kent, 1960, p. 509

*Lucina compressa* Lea, 1833, p. 55, pl. 1, fig. 27; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 387

under *Lucina pandata* Conrad; Tuomey, 1858, pp. 266, 274; de Gregorio, 1890, p. 206, pl. 29, fig. 1 copy Lea, figs. 2-5; Cossmann, 1893, p. 11; Harris, 1895b, p. 12 (*L. pandata* Conrad)  
*Cyclas pandata* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8  
*Phacoides (Miltha) pandatus* (Conrad), Dall, 1903a, p. 1374 in part;  
 ? Kellum, 1926, p. 24  
*Miltha (Eomiltha) pandata* (Conrad), Stewart, 1930, p. 191  
*Eomiltha pandata* Conrad, Chavan, 1938, p. 93

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type). N. C.: *Craven Co.*, Rocky Ldg., Neuse R.

*Types*.—Possible syntypes, Nos. 30573, 30574 ANSP Moore, 1962, p. 83. Holotype *Lucina compressa* Lea, No. 5149 ANSP

### **Eophysema ozarkana (Harris)**

### **Lucinidae**

*Lucina ozarkana* Harris, 1897b, p. 72, pl. 14, figs. 7, 7a, 7b; Harris, 1899b, p. 303; Harris, 1919, p. 118, pl. 38, figs. 24, 24a, 25; Brann and Kent, 1960, pp. 508, 509 in part

*Lucina subvexa* Conrad, Dall, 1903a, p. 1352 in part, not p. 1353

? *Lucina dartoni* Clark, Harris, 1919, p. 118, not Clark, 1895

*Loripinus ozarkanus* (Harris), Stewart, 1930, p. 186

*Lucina (Eophysema) ozarkana* Harris, Chaven, 1951, p. 212

*Range*.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

*Localities*.—ALA.: *Dale Co.*, Ozark (type); *Clarke Co.*, Woods Bluff, Tombigbee R.

*Types*.—Syntypes, Nos. 226, 227 PRI

### **Eophysema cf. ozarkana (Harris)**

### **Lucinidae**

*Lucina ozarkana* Harris, 1919, p. 118, pl. 38, figs. 26, 26a; Brann and Kent, 1960, p. 509. Not Harris, 1897b, p. 72

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.; base of bluff, Claiborne, Alabama R.

*Type*.—Figured specimens, Nos. 757, 758 PRI

### **Eophysema ozarkana (Harris) ? "var."**

### **Lucinidae**

*Lucina (Eophysema) ozarkana* ? var., Harris in Harris and Palmer, 1946, p. 90, pl. 20, figs. 6, 6a, 7; Brann and Kent, 1960, p. 509

*Range*.—Upper Eocene. Lower Jackson gr.

*Localities*.—LA.: *Caldwell Par.*, Gibson Ldg., Ouachita R. MISS.: *Hinds Co.*, Jackson

*Types*.—Figured specimens, Nos. 4334-4336 PRI

### **Eophysema subvexa (Conrad)**

### **Lucinidae**

*Lucina subvexa* Conrad, 1833c, p. 40 (Harris reprint, 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 403, pl. 4, fig. 14; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386; Harris, 1895b, p. 44; Dall, 1903a, p. 1352 in part

*Cyclas subvexa* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8

*Lucina* (*Loripes*) *subvexa* Conrad, de Gregorio, 1890, p. 207, pl. 29, fig. 14 copy Conrad; Cossmann, 1893, p. 12; Harris, 1919, p. 119 in part, pl. 39, fig. 1 copy Conrad, figs. 2, 4 see *Anodontia* ? *angustana* Gardner; not Brann and Kent, 1960, pp. 512, 513, Nos. 760, 762 see *A.* ? *angustana* Gardner. Not Harris, 1919, pl. 39, figs. 3, 5, 5a see *L. sylvaerupis* Harris

*Loripinus* (*Eophysema*) *subvexa* (Conrad), Stewart, 1930, p. 186 type species *Eophysema* Stewart, 1930

*Anodontia* ? *subvexa* (Conrad), Gardner, 1945, p. 94 in part

*Lucina* (*Eophysema*) *subvexa* Conrad, Harris and Palmer, 1946, pl. 20, fig. 8? Conrad type. The figure given here does not coincide with Conrad's type figure but does with description Conrad, 1846c, p. 403; Brann and Kent, 1960, p. 513

*Anodontia subvexa* (Conrad), Chavan, 1938, p. 123

There is doubt as to the true character of this species as well as the horizon from which it came. Unfortunately it was designated a type species.

*Range*.—Middle Eocene. Gosport sd. (? type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Probable holotype, No. 30501 ANSP Moore, 1962, p. 100

### **Eosolen lisbonensis** (Aldrich)

### **Solenidae**

*Solen lisbonensis* Aldrich, 1886, p. 37, pl. 4, fig. 4; de Gregorio, 1890, p. 235, pl. 38, fig. 14 copy Aldrich not Meyer as in text; Harris, 1919, p. 195, pl. 59, fig. 2 copy Aldrich

*Solen* sp. Harris, 1897b, p. 66, pl. 13, fig. 9; Brann and Kent, 1960, p. 805

*Solen* (*Plectosolen*) *lisbonensis* Aldrich, Dall, 1900, p. 953; Clark and Martin, 1901, p. 165 in part

*Solena* (*Eosolen*) *lisbonensis* (Aldrich), Stewart, 1930, p. 290; Gardner, 1945, p. 111

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type); McBean fm., upper Claiborne gr.

*Localities*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type).

GA.: Clay Co., Fort Gaines. MISS.: Clarke Co. Md. and Va. localities questioned by Clark and Martin

*Type*.—Holotype, No. 638794 USNM. Not No. 6224 ANSP as in Clark and Martin

### **Cf. Eosolen abruptus** (Dall)

### **Pl. 3, figs. 7, 8 Solenidae**

*Solen* (*Plectosolen*) *lisbonensis abruptus* Dall, 1900, p. 953; Clark and Martin, 1901, p. 165 in part; Schuchert, *et al.*, 1905, p. 603

*Solen lisbonensis* var. *abruptus* Dall, Harris, 1919, p. 195

*Solena* (*Eosolen*) *lisbonensis abruptus* (Dall), Gardner, 1945, p. 111 in part

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr. (type)

*Locality*.—MISS.: Clarke Co. (type Dall). USGS Sta. 2626 "McLeods Mill on Suwanlovey Creek Clarke County Miss. 6 miles west of Desoto Station on railroad. Shoal of hard Ferugious [sic] Sand in the Creek making good mill seat. Frank Burns Coll. 1894." (USNM Cat.)

*Types*.—Lectotype, No. 140118; paralectotypes, Nos. 644665, 644666 USNM

The species is figured herein for the first time. Examination of the syntypes through courtesy of the USNM confirms what Dall suggested that the form is distinct from *E. lisbonensis* for the reasons he stated. No. 140118 USNM is here selected as the lectotype. Dimensions are given in the explanation of the plate.

### **Epilucina rotunda (Lea)**

### **Lucinidae**

*Lucina symmetrica* Conrad, 1833c, p. 40 not adequate; (Harris reprint 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 387; Harris, 1895b, p. 44

*Lucina rotunda* Lea, 1833, p. 56, pl. 1, fig. 28; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 387 under *L. symmetrica* Conrad; de Gregorio, 1890, p. 205, pl. 29, figs. 6, 7, fig. 8 copy Lea; Cossmann, 1893, p. 11; Harris, 1895b, p. 39; Harris, 1919, p. 122, pl. 40, figs. 1, 2, 2a; Brann and Kent, 1960, p. 512. Not Aldrich, 1886, p. 50

*Cyclas symmetrica* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 9  
*Phacoides rotundus* (Lea), Dall, 1903a, p. 1364

*Claibornites rotundus* (Lea), Stewart, 1930, p. 183 type\*species *Claibornites* Stewart, 1930

*Epilucina rotunda* (Lea), Chavan, 1937, p. 275

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes, No. 5152 ANSP, left valve [right valve missing *fide* Harris, 1919]; *Lucina symmetrica* Conrad possible syntypes (6), No. 30522 ANSP Moore, 1962, p. 100

### **Epilucina sp.**

### **Lucinidae**

*Lucina rotunda* Lea, Aldrich, 1886, p. 50. Not Lea, 1833, p. 56

*Lucina symmetrica* ? Conrad, Harris, 1897b, p. 71, pl. 14, fig. 4; Brann and Kent, 1960, p. 513

*Range*.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: NE. Washington Co., Hatchetigbee Bluff, Tombigbee R.

*Type*.—Figured specimen, No. 225 PRI

### **Ervilia lignitica Aldrich**

### **Mesodesmatidae**

*Ervilia lignitica* Aldrich, 1921, p. 21, pl. 3, figs. 8, 9

*Range*.—Lower Eocene. Bells Ldg. mem. (type) Tuscahoma fm., middle Wilcox [Sabine] gr.; Greggs Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.

*Localities*.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type); Greggs Ldg., Alabama R.

*Type*.—Holotype, No. 17 GSATC

### **Ervilia lignitica wheeleri Aldrich**

### **Mesodesmatidae**

*Ervillia* [sic] *lignitica* var. *wheeleri* Aldrich, 1931, p. 9

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 71 GSATC

**Ervilia meyeri** Aldrich**Mesodesmatidae**

*Ervilia meyeri* Aldrich, 1911, p. 5, pl. 1, fig. 7; Harris, 1919, p. 174, pl. 52, fig. 16 copy Aldrich

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: [? Co.], "Claiborne Sand bed, Tombigbee River"

*Type*.—Holotype, No. 6391165 USNM

**Erycina aequorea** Conrad

See *Mactropsis aequorea* (Conrad)

**Erycina plicatula** Dall**Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Erycina plicatula* Dall, 1899, p. 883 listed only; Dall, 1900, p. 1143, pl. 44, figs. 7, 12; Schuchert, et al., 1905, p. 248; Harris, 1919, p. 107, pl. 37, figs. 7, 8 copy Dall

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes, No. 137389 USNM

**Erycina rectilinearis** Conrad

See *Mactropsis rectilinearis* (Conrad)

**Erycina whitfieldi** Meyer**Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Erycina whitfieldi* Meyer, 1886b, p. 82, pl. 1, fig. 29; Meyer, 1887a, p. 11 in part, not pl. 2, fig. 8; de Gregorio, 1890, p. 210, pl. 30, fig. 15 copy Meyer; Cossmann, 1893, p. 12; Dall, 1899, p. 883; Dall, 1900, p. 1143; Harris, 1919, p. 107, pl. 37, fig. 9 copy Meyer, 1886b; Harris and Palmer, 1946, p. 84 in part, not pl. 19, fig. 7, Meyer specimen not type as stated.

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne fm.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638849 USNM

**Erycina whitfieldi** Meyer in part

See *Erycina zitteli* Meyer

**Erycina whitfieldi meyeri** Cossmann**Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Erycina Whitfieldi Meyeri* Cossmann, 1893, p. 12; Dall, 1899, p. 883; Dall, 1900, p. 1143

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 11510, Lab. Géol., Sorbonne, Paris

**Erycina zitteli** Meyer**Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Erycina zitteli* Meyer, 1887a, p. 11, pl. 2, fig. 9; Dall, 1899, p. 883; Dall, 1900, p. 1143; Harris and Palmer, 1946, p. 84, pl. 19, fig. 8 type *Erycina whitfieldi* Meyer, Meyer, 1887a, p. 11 in part, pl. 2, fig. 8; Harris and Palmer, 1946, p. 84 in part, pl. 19, fig. 7 Meyer specimen but not type as stated.



*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Jackson (type)

*Type*.—Holotype, No. 638889 USNM. Holotype *E. Whitfieldi* Meyer, 1887a, pl. 2, fig. 8 = No. 638888 USNM

***Etea delawarensis* (Gabb)      Arctiidae (also placed in Pleurophoridae)**

*Crassatella delawarensis* Gabb, 1860a, p. 303, pl. 48, fig. 20; Whitfield, 1885, p. 210, pl. 27, figs. 14-15

*Etea delawarensis* (Gabb), Conrad, 1877, p. 275; Weller, 1907, p. 546, pl. 59, figs. 8, 9; Richards in Richards, *et. al.*, 1958, p. 177, pl. 28, fig. 4; pl. 29, fig. 11; pl. 31, fig. 1

*Range*.—Upper Cretaceous (type ?). Lower Eocene. Manasquan fm.

*Localities*.—N.J.: *Burlington Co.*, Crosswicks ? (type) [Cretaceous locality] Pemberton; *Camden Co.*, Clementon; *Monmouth Co.*, near Farmingdale; well at Interlaken [Eocene localities]

*Type*.—Holotype, No. 18733 ANSP

? "***Euloxa***" sp. *Incerta sedes*

**Veneridae**

*Euloxa* sp., Harris, 1951, pp. 17, 18, pl. 8, figs. 1, 2; Nicol, 1953, p. 57 not *Euloxa*; Brann and Kent, 1960, p. 381

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—FLA.: *Marion Co.*, Ocala Lime Rock Corp., E. of Kendrick

*Type*.—Figured specimen, No. 24480 PRI

***Exputens ocalensis* (MacNeil)**

? **Vusellidae**

*Vulsella ocalensis* MacNeil, 1934, p. 429, figs. 5-11, 431; Harris, 1951, p. 14, pl. 6, figs. 7, 7' copy MacNeil

*Range*.—Upper Eocene. "Ocala ls." (type), Ocala gr.

*Localities*.—FLA.: *Sumpter Co.*, Sumpter Rock Co. Quarry, about 2 mi. NE. of Sumpterville; *Alachua Co.*, Cummer Lumber Co., 1¼ mi. S. of Newberry

*Types*.—Lectotype herein designated, No. 373052 USNM, figs. 10, 11; paratype, No. 373052 USNM, figs. 5, 6; paratype, No. 373053 USNM, figs. 7-9 [lectotype designated from original "cotypes" = syntypes, "cotypes" and paratype not possible in same classification.]

*Fabella oblonga* Aldrich

See *Sportella oblonga* (Aldrich)

*Felaniella nana* (Lea)

See *Microstagon nana* (Lea)

*Fimbria claiborensis* (Dall), Richards

See *Corbis lirata* (Conrad)

***Fimbria olssoni* Richards**

**Fimbriidae (Corbidae)**

*Fimbria olssoni* Richards in Richards and Palmer, 1953, p. 51, pl. 11, fig. 1

*Range*.—Middle Eocene. Avon Park ls. (type), upper Claiborne gr.  
*Locality*.—FLA.: Levy Co., New Lebanon dolomite pit SW.  $\frac{1}{4}$   
 NE.  $\frac{1}{4}$  sec. 12, T. 16 S., R. 16 E. (type)  
*Type*.—Holotype, No. I-7558 Fla. Geol. Sur.

**Fimbria vernoni** Richards**Fimbriidae** (Corbidae)

*Fimbria vernoni* Richards in Richards and Palmer, 1953, p. 50, pl. 11,  
 figs. 2-4

*Range*.—Upper Eocene. Inglis fm. (type), lower Ocala gr.  
*Localities*.—FLA.: Levy Co., road metal pit 2.9 mi. S. of N. limits  
 of town of Gulf Hammock just SW. of State Road 55, SW.  $\frac{1}{4}$   
 sec. 34, T. 14 S., R. 16 E. (type); Withlacoochee R. at dam  
 Florida Power Corp., SW.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  sec. 8, T. 17 S., R. 17 E.  
*Types*.—Holotype, I-7556; paratype, I-7557 Fla. Geol. Sur.

*Fistulana elongata* Deshayes, Conrad

See *Gastrochaena larva* (Conrad)

*Fistulana larva* Conrad

See *Gastrochaena larva* (Conrad)

**Flexopecten anatis** (Morton)

Pl. 1, fig. 3

**Pectinidae**

*Pecten anatis* Morton, 1833a, p. 293, pl. 5, fig. 4; Morton, 1834, p.  
 58, pl. 5, fig. 4; H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 393;  
 Conrad, 1865a, p. 14; Conrad, 1866a, p. 23; Heilprin, 1882a, p. 417,  
 Oligocene; de Gregorio, 1890, p. 181, pl. 21, fig. 29 copy Morton;  
 Cooke, 1926a, p. 282, pl. 97, fig. 2

*Pallium anatis* (Morton), Cossmann, 1893, p. 18

*Pecten (Nodipecten) anatis* (Morton), Dall, 1898b, p. 730; Dall,  
 1916, p. 492 in part under subgenus *Chlamys*

Not *Chlamys (Flexopecten) anatis* (Morton), Ugolini, 1903, pp.  
 77-94. See Teppner, 1922, p. 191

*Aequipecten (Nodipecten) anatis* Morton, Teppner, 1922, p. 199

*Chlamys (Chlamys) anatis* (Morton), Tucker-Rowland, 1936b, p.  
 1004, pl. 7, fig. 2; pl. 10, fig. 13 holotype not "St. Stephens Bluff."

*Chlamys anatis* (Morton), Harris, 1951, p. 10, pl. 5, fig. 2

*Range*.—Upper Eocene. Jackson gr. (type); "Ocala ls.", Ocala  
 gr. Oligocene. Vicksburg gr. (Cooke, 1926a)

*Localities*.—ALA.: Monroe Co., "overlying limestone at Claiborne"  
 (type). If this species is present in the Vicksburg (see Cooke,  
 1926a) one would question whether the type was in place when  
 found. FLA.: Jackson Co., Marianna Limestone Products Co.,  
 sec. 23, T. 5 N., R. 11 W., J-5 (Harris, 1951; Wayne Moore,  
 1955, p. 36)

*Type*.—Holotype, No. 12575 ANSP

*Gafrarium distans* (Conrad)

See *Corbis undata* Conrad

*Gafrarium liratum* Conrad

See *Corbis lirata* (Conrad)

**Gari (Gobraeus) blainvillii** (Lea)Pl. 3, fig. 3 **Gariidae**

*Solecurtus Blainvillii* Lea, 1833, p. 39, pl. 1, fig. 7; H. C. Lea, 1849, p.  
 106, *Blainvillii*; de Gregorio, 1890, p. 235, pl. 33, fig. 21 copy Lea;  
 Harris, 1895b, p. 8

*Gari* (*Psammocola*) *Blainvillii* (Lea), Conrad, 1865a, p. 4  
*Psammobia eborea* (Conrad), Heilprin, 1884b, p. 90 in part  
*Solenocurtus* [sic] *Blainvillei* [sic] (Lea), Cossmann, 1893, p. 5, pl. 1, figs. 2, 3  
*Psammobia* (*Gobraeus*) *blainvillei* (Lea), Dall, 1898c, p. 60  
*Psammobia Blainvillei* (Lea), Dall, 1900, pp. 959, 976, 977  
*Psammobia blainvillei* (Lea), Harris, 1919, p. 155, pl. 48, fig. 6 copy  
 Lea

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5021 ANSP

*Gari cerasium* (Dall), Harris, 1951 not *Psammobia cerasia* Dall, 1916, p. 501  
 See *Gari* sp.

#### **Gari eborea** (Conrad)

#### **Gariidae**

*Psammobia eborea* Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 105; d'Orbigny, 1850, p. 377 as *Tellina*; Heilprin, 1884b, p. 90 in part; Cossmann, 1893, p. 9; Harris, 1895b, p. 17; Dall, 1900, pp. 976-978 *Gobraeus*; Harris, 1919, p. 156, pl. 48, figs. 8-11; Brann and Kent, 1960, p. 740 not No. 1208=*Egerella triangulata* Lea

*Psammobia* (*Psammocola*) *eborea* Conrad, de Gregorio, 1890, p. 226

*Solecurtus Blainvillii* Lea, de Gregorio, 1890, p. 235 in part

*Gari* (*Psammocola*) *eborea* (Conrad), Conrad, 1865a, p. 4 *Gari eborea* (Conrad), Harris and Palmer, 1946, p. 97, pl. 21, figs. 10, 11 (as *eboreum*); Brann and Kent, 1960, p. 400

*Gari* sp. cf. *G. eborea* (Conrad), Gardner, 1945, p. 109 in part

? *Psammobia* cf. *eborea* Conrad, Richards, 1948, p. 2, pl. 2, fig. 11; Richards, 1950, p. 15

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.; middle Eocene N.C. (Richards)

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). N.C.: Johnston Co., Clayton (Richards) (compared)

*Types*.—Syntypes (2), No. 30530 ANSP, Moore, 1962, p. 56

*Gari filosa* (Conrad)

See *Garum filosa* (Conrad)

#### **Gari harrisi** (Aldrich)

#### **Gariidae**

*Psammobia harrisi* Aldrich, 1921, p. 24, pl. 3, figs. 19, 20

*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type)

*Type*.—Holotype, No. 54 GSATC

#### **Gari jacksonensis** Harris

#### **Gariidae**

*Gari jacksonensis* Harris in Harris and Palmer, 1946, p. 97, pl. 21, figs. 12, 13, 14; Richards and Palmer, 1953, p. 53, pl. 12, fig. 4; Brann and Kent, 1960, p. 400

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.; Inglis fm., lower Ocala gr. (Fla.)

*Localities*.—LA.: Grant Par., Montgomery, Red R. (type). FLA.: Levy Co., Florida Power Corp., Withlacoochee R., SW.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  sec. 8, T. 17 S., R. 17 E. (Richards)

*Types*.—Holotype, No. 4353; paratypes, Nos. 4354, 4356 PRI

**Gari (Gobraeus) ozarkana (Harris)**

**Gariidae**

*Psammobia ozarkana* Harris, 1897b, p. 65, pl. 12, fig. 14; pl. 13, fig. 8;

Brann and Kent, 1960, p. 741

*Psammobia (Gobraeus) ozarkana* Harris, Dall, 1898c, p. 60

*Gari ozarkanum* (Harris), Harris and Palmer, 1946, p. 98, pl. 21, fig. 13a; Brann and Kent, 1960, p. 401

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Dale Co., Ozark (type)

*Types*.—Syntypes, No. 169, 176 PRI

**Gari smithi (Aldrich)**

**Gariidae**

*Psammobia Smithi* Aldrich, 1921, p. 23, pl. 3, figs. 17, 18

*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

*Types*.—Syntypes, No. 53 GSATC

**Gari sp.**

**Gariidae**

*Gari cerasium* (Dall), Harris, 1951, p. 24, pl. 13, fig. 5. Not *Psammobia cerasia* Dall, 1916, p. 501

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—FLA.: Marion Co., SW. of mill and office of Dixie Lime Products Company, Reddick

*Type*.—Figured specimen, No. 24522 PRI [Reference omitted in Brann and Kent, 1960]

**Garum claibornense\* Dall**

Pl. 3, figs. 4, 5 **Gariidae**

*Psammobia (Garum) claibornensis* Dall, 1898c, p. 60 *nomen nudum*;

Dall, 1900, p. 978; Harris, 1919, p. 155 in description of Conrad's

*P. filosa*; Vokes, 1956a, p. 763

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, probably one of the two probable syntypes of *Psammobia [Garum] filosa* Conrad, ANSP, Moore, 1962, p. 61. Dall (1900, p. 978) stated, "On the same card with Conrad's type in the collection of the Academy of Natural Sciences is another shell . . . I would propose the name of *Psammobia (Garum) claibornensis*."

**Garum filsum (Conrad)**

Pl. 3, fig. 1 **Gariidae**

*Psammobia filosa* Conrad, 1833c, p. 42 (Harris reprint, 1893 p. 68);

Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 105; Harris,

\**Garum*, Latin, neuter

1895b, p. 19; Dall, 1900, pp. 976, 977; Harris, 1919, p. 155, pl. 48, fig. 7 type; de Gregorio, 1890, p. 225 sp. dub.; Cossmann, 1893, p. 9 *Tellina subfilosa* d'Orbigny, 1850, p. 377 new name by D'Orbigny for *Psammobia filosa* Conrad when the species was moved to *Tellina* by D'Orbigny. Not *Tellina filosa* James de Carle Sowerby, 1823, p. 143 pl. 402, fig. 2. The species is not a *Tellina* so the change is not necessary.

*Gari filosa* (Conrad), Conrad, 1865a, p. 4; Conrad, 1866a, p. 8

*Psammobia (Garum) filosa* Dall, 1898c, p. 60

*Garum filosa* (Conrad), Vokes, 1956a, pp. 762, 763 designated type species Dall, 1898c, p. 60, not Dall, 1900, p. 975

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes (2), No. 30526 ANSP, Moore, 1962, p. 61. One of these syntypes may be the type of *G. claibornense* Dall. See his description.

*Gastrochaena americana* Gabb

See *Kummelia americana* (Gabb)

#### **Gastrochaena cimitariopsis** Harris

#### **Gastrochaenidae**

*Gastrochaena cimitariopsis* Harris, 1896, p. 70, pl. 6, fig. 13; Brann and Kent, 1960, p. 401

*Gastrochaena (Spengleria ?) cimitariopsis* Harris, Dall, 1898b, p. 824

*Range*.—Paleocene. Midway gr. (type)

*Locality*.—GA.: Clay Co., Fort Gaines, Chattahoochee R. (type)

*Type*.—Holotype, No. 80 PRI

*Gastrochaena Dalli* ("Harris"), in Dall, 1898b, pp. 820, 824 error for *dalliana* Harris, 1896 (*Martesia*). *Nomen nudum*

See *Gastrochaena dalliana* (Harris)

#### **Gastrochaena dalliana** (Harris)

#### **Gastrochaenidae**

*Martesia dalliana* Harris, 1896, p. 71, pl. 6, fig. 15; Brann and Kent, 1960, p. 534

*Gastrochaena dalli* [sic] (Harris), Dall, 1898b, pp. 820 (as *Martesia*), p. 824 error for *dalliana*

*Range*.—Paleocene. Midway gr. (type)

*Locality*.—GA.: Clay Co., Chattahoochee R., N. of Sandy Creek (type)

*Type*.—Holotype, No. 77 PRI

#### **Gastrochaena gainesensis** Harris

#### **Gastrochaenidae**

*Gastrochaena gainesensis* Harris, 1896, p. 70, pl. 6, figs. 12, 12a; Dall, 1898b, p. 824; Brann and Kent, 1960, p. 401

*Range*.—Paleocene. Midway gr. (type)

*Locality*.—GA.: Clay Co., Fort Gaines, Chattahoochee R. (type)

*Types*.—Syntypes, Nos. 78, 79 PRI

#### **Gastrochaena larva** (Conrad)

#### **Gastrochaenidae**

*Fistulana elongata* Deshayes, Conrad, App. in Morton, 1834, p. 8; Conrad, 1842b, p. 175 footnote "in the sand" Claiborne. Not *F. elongata* Deshayes, 1824, p. 15



- Gastrochaena elongata* (Deshayes), d'Orbigny, 1850, p. 375  
*Fistulana larva* Conrad, 1846b, p. 212, pl. 2, fig. 5, not pl. 1 as in text;  
 H. C. Lea, 1849, p. 99; Harris, 1895b, p. 23  
*Gastrocheana larva* (Conrad), Conrad, 1865a, p. 2; Conrad, 1866a, p. 9; de Gregorio, 1890, p. 236, pl. 38, fig. 24 copy Conrad; Cossmann, 1893, p. 5; Aldrich, 1895b, p. 19, pl. 5, fig. 12; Dall, 1898b, p. 824; Harris, 1919, p. 197, pl. 59, figs. 11 copy Aldrich, fig. 12 copy Conrad

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Possible holotype (broken), No. 15883 ANSP, Moore, 1962, p. 68

***Gastrochaena mississippiensis* Harris**

**Gastrochaenidae**

*Gastrochaena mississippiensis* Harris in Harris and Palmer, 1946, p. 120, pl. 25, figs. 7-11; Brann and Kent, 1960, p. 401

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: Hinds Co., Town Creek, Jackson (type)

*Type*.—Holotype, No. 4428 (right valve); No. 4429 (left valve)  
 PRI

***Gastrochaena striatula* Aldrich**

**Gastrochaenidae**

*Gastrochaena striatula* Aldrich, 1903a, p. 20, fig. 2

*Range*.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type).

*Type*.—Holotype, No. 38 GSATC

*Gastrochaena subbipartita* Meyer, 1887a p. 12; de Gregorio, 1890, p. 236; Cossmann, 1893, p. 5; Dall, 1898b, p. 824 is a *nomen nudum*. Meyer did not describe or figure the species. No specimen in USNM

***Gastrochaena* sp.**

**Gastrochaenidae**

*Gastrochaena* sp. Clark, 1895, p. 5; Clark, 1896, p. 73, pl. 15, fig. 6; Clark and Martin, 1901, p. 161, pl. 30, fig. 5

*Range*.—Paleocene. Aquia fm. (type)

*Localities*.—MD.: Prince Georges Co., Upper Marlboro. VA.: Stafford Co., Aquia Cr. (type)

*Type*.—Figured specimen, USNM

***Gastrochaena* sp.**

**Gastrochaenidae**

*Gastrochaena* sp. Harris, 1896, [no. p.], pl. 6, fig. 14; Brann and Kent, 1960, p. 401

*Range*.—Paleocene. Midway gr.

*Locality*.—GA.: Clay Co., Fort Gaines

*Type*.—Figured specimen, No. 81 PRI

***Gastrochaena* sp.**

**Gastrochaenidae**

*Gastrochaena* sp. Kellum, 1926, p. 24, pl. 3, fig. 8

*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.

*Locality*.—N.C.: New Hanover Co., Wilmington

*Type*.—Figured specimen, No. 352258 USNM

**Gastrochaena sp.****Gastrochaenidae**

*Gastrochaena* sp. Meyer, 1887a, p. 12, pl. 2, figs. 10, 10a, not figs. 11, 11a, 11b as stated in text; de Gregorio, 1890, p. 236, pl. 38, figs. 22, 23 copy Meyer; Harris, 1919, p. 198, pl. 59, figs. 14, 15 copy Meyer

*Range*.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R.

*Type*.—Figured specimen, No. 638891 USNM

**Gemma sanctimauricensis Harris****Veneridae**

*Gemma sancti-mauricensis* Harris, 1919, p. 152, pl. 47, figs. 14, 15; Palmer, 1927/1929, p. 205, pl. 43, figs. 3, 7; Brann and Kent, 1960, p. 403

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—LA.: "Sabine River?" Harris (Veatch Survey, 1902, p. 129) (type)

*Type*.—Holotype, No. 1197 PRI

**Gigantostrea sylvaeurupis (Harris)****Ostreidae**

*Ostrea compressirostra* Say, Tuomey, 1850, p. 146; Smith, E. A. and Johnson, L. C., 1887, p. 44. Not *O. compressirostra* Say, 1824b

*Ostrea carolinensis* Conrad, 1865f, p. 71; Conrad, 1865h, p. 266, not Conrad, 1832b, p. 27

*Ostrea* (probably *O. thirsae* Gabb), Aldrich, 1886, p. 53

*Ostrea trigonalis* var. *sylvaeurupis* Harris, 1897b, p. 38, pls. 4, 5; pl. 6, figs. 3, 3a, 4; Brann and Kent, 1960, p. 643

*Ostrea percrassa* Conrad, Dall, 1898b, p. 683 in part; not *Ostrea percrassa* Conrad, McLean, 1956, p. 307 in chart

*Ostrea sylvaeurupis* Harris, Barry, 1942+, p. 54, pl. 5, fig. 1

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.; Sabinetown fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type); 3 mi. SW. of Thomasville; near mouth of Bashi Cr. TEXAS: Sabine Co., RR. cut in NW.  $\frac{1}{4}$  SE.  $\frac{1}{4}$  sec. 11, T. 6 N., R. 11 W., N. of fire tower. LA.: Sabine Par., hillside on Mitchell farm in SE.  $\frac{1}{4}$  NE.  $\frac{1}{4}$  sec. 5, T. 6 N., R. 10 W.

*Types*.—Syntypes, Nos. 135, 136, 214 PRI.

**Gigantostrea trigonalis (Conrad)****Ostreidae**

*Ostrea trigonalis* Conrad in Wailes, 1854, p. 289, pl. 14, fig. 10 (reprint 1939, p. 19, pl. 1, fig. 10); Conrad, 1856a, p. 259 (reprint, 1939, p. 5); Heilprin, 1884c, p. 311; Dall, 1898b, p. 681 in part; Cooke, 1926a, p. 274, pl. 96, fig. 3; Kellum, 1926, p. 17; Semmes, 1929, fig. 62-3; Shimer and Shrock, 1944, p. 397 in part, pl. 154, not figs. 19, 20 copy Glenn, 1904, Miocene; Gardner, 1945, p. 83 in part; Harris and Palmer, 1946, p. 21, pl. 4, figs. 1-6; cf. Richards, 1950, p. 18; cf. Harris, 1951, p. 7, pl. 2, figs. 4, 5; Brann and Kent, 1960, pp. 642, 643

*Ostrea pandaeformis* Gabb, 1862a, p. 328

*Ostrea tuomeyi* Conrad, 1865g, p. 184; Heilprin, 1884c, p. 311; de Gregorio, 1890, p. 176; Cossmann, 1893, p. 18

*Ostrea mortonii* Gabb, Aldrich, 1887, p. 79 not Gabb, 1862a

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type). ALA.: *Choctaw Co.*, Fail P.O.; *Cocoa P.O.*; *Turks Cave* *vide* Dall. LA.: *Grant Par.*, Creole Bluff, Montgomery, Red. R. Cf. N.C.: *Duplin Co.*, 2 mi. S. of Kornegay; *Wayne Co.*, Broadhurst Bridge. Cf. FLA.: *Marion Co.*, Dixie Lime Products, Reddick

*Types*.—Holotype, No. 13184 ANSP, Moore, 1962, p. 104. *Ostrea tuomeyi* Conrad, missing ANSP, Moore, 1962, p. 105

*G. trigonalis* has been confused with Miocene shells since Dall, 1898b, extended the range beyond a reasonable stratigraphic development. Glenn, (1904, p. 381, pl. 101, figs. 1a, b) included the species in the Choptank Miocene of Maryland and figured a specimen. Gardner (1927, p. 42) and Vokes (1961, p. 10) followed the same inclusion in the Miocene. The Miocene record needs clarification for undoubtedly there is a confusion of species. Harris in Harris and Palmer, 1946 (pp. 21-24) gave a detailed discussion of the species. It is an upper Eocene form. As Harris (1946) stated, "This is a large characteristic oyster of the Jackson beds of the Mississippi Embayment area. It may be expected from central Louisiana to Alabama in both the Garland Creek and Zeuglodon horizons . . .". It is unfortunate that the species has been included in the Miocene.

#### **Glossus ? conradi (Gabb)**

#### **Glossidae**

*Isocardia conradi* Gabb, 1860d, p. 393, pl. 68, figs. 21, 21a; Whitfield, 1885, p. 200, pl. 26, figs. 3, 4 type; Whitfield, 1899, p. 159; Johnson, 1905, p. 15; Weller, 1907, p. 599, pl. 66, figs. 13, 14 type

*Glossus conradi* (Gabb), Gabb, 1861, p. 186; Meek, 1864, p. 12

*Range*.—Lower Eocene. Vincentown fm. (type)

*Locality*.—N.J.: boundary between Gloucester and Camden Cos., Timber Creek (type)

*Type*.—ANSP (Johnson, 1905)

*Glossus filiosus* Conrad

See *Glycymeris filosa* (Conrad)

*Glossus fillosus* [sic] Conrad

See *Glycymeris filosa* (Conrad)

#### **Glossus mediavia (Harris)**

#### **Glossidae**

*Isocardia mediavia* Harris, 1896, p. 66, pl. 6, fig. 5; Dall, 1900, p. 1066; Brann and Kent, 1960, p. 459

*Range*.—Paleocene. Clayton fm., lower Midway gr.; Matthews Ldg. beds (type), uppermost Porters Cr. fm., upper Midway gr.; Naheola fm., upper Midway gr.

*Localities*.—ALA.: *Wilcox Co.*, 1 mi. N. Midway; Matthews Ldg., Alabama R. (type); *Sumter Co.*, Black Bluff, Tombigbee R.

*Type*.—Holotype, No. 69 PRI

#### **Glossus ? vetus (Conrad)**

#### **Glossidae**

*Bucardia veta* Conrad, 1869b, p. 41, pl. 1, fig. 2 not 3 as in Whitfield Not *Caryatis ? veta* Whitfield, 1885, p. 218, pl. 28, figs. 16-19 in part "*Bucardia*" *veta* Conrad, Dall, 1900, p. 1066

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N.J.: *Monmouth Co.*, Shark R. (type)

*Type*.—Missing, ANSP, Moore, 1962, p. 107

*Glycimeris* [sic] *elongata* (Conrad)

See *Panopea elongata* Conrad

*Glycimeris* [sic] *porrectoides* (Aldrich), de Gregorio

See *Panopea porrectoides* Aldrich

Glycymeridae=Glycymerididae

*Glycymeris alabama* Harris

See *Panopea alabama* (Harris)

*Glycymeris* cf. *anteparilis* Kellum, Harris, 1951

See *Glycymeris* sp.

*Glycymeris arctata cookei* Dall

See *Glycymeris* sp. Harris, 1951

### **Glycymeris conradi** (Whitfield)

### **Glycymerididae**

*Axinea Conradi* Whitfield, 1885, p. 230, pl. 29, figs. 10, 11; Whitfield, 1899, p. 154

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N.J.: Monmouth Co., Shark R. (type)

*Type*.—Holotype, No. 7804, State Mus., Trenton, N.J.

*Glycymeris deltoideus ignus* (de Gregorio), Harris, 1919, p. 201 variation

See *Glycymeris trigonella* (Conrad)

*Glycymeris deltoideus precuneata* (de Gregorio), Harris, 1919, p. 201 variation

See *Glycymeris trigonella* (Conrad)

*Glycymeris deltoideus striatus* (de Gregorio), Harris, 1919, p. 201 variation

See *Glycymeris trigonella* (Conrad)

### **Glycymeris filosa** (Conrad)

### **Glycymerididae**

*Glossus filiosus* Conrad in Wailes, 1854, p. 289, pl. 14, fig. 8 as *filiosus* (reprint 1939, p. 19, pl. 1, fig. 8); Conrad, 1856a, p. 259 (reprint 1939, p. 9); Hilgard in Hopkins, 1871, p. 11

*Axinaea filosa* (Conrad), Conrad, 1858b, p. 166; Conrad, 1866a, p. 23

*Axinaea inequistris* Conrad, 1865b, p. 139, pl. 10, fig. 12; Conrad, 1866a, p. 23

*Axinaea duplistria* Conrad, 1865b, p. 139, pl. 10, fig. 19; Conrad, 1866a, p. 23

*Glycymeris filosa* (Conrad), Dall, 1898b, p. 607; Dall, 1900, p. 1066; Harris and Palmer, 1946, p. 49, pl. 12, figs. 1-3; Brann and Kent, 1960, p. 423

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: Hinds Co., Jackson (type); Town Creek, Jackson; Clarke Co., "Enterprise"—Garland Cr. *vide* Aldrich, 1885c, p. 307 (*Axinaea inequistris* and *A. duplistria*). LA.: Grant Par., Montgomery, Red. R.

*Types*.—Syntypes (4), No. 13181 ANSP, Moore, 1962, p. 61. *Axinaea duplistria* Conrad, holotype, No. 13228 ANSP, Moore, 1962, p. 56. *Axinaea inequistris* Conrad holotype, No. 13227 ANSP, Moore, 1962, pp. 66, 67

**Glycymeris idonea** (Conrad)**Glycymerididae**

- Pectunculus idoneus* Conrad, 1833c, p. 39; (Harris reprint, 1893, p. 65); Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389; Heilprin, 1884b, p. 87; de Gregorio, 1890, p. 195; Harris, 1895b, p. 22
- Trigonarca (Latiarca) idonea* (Conrad), Conrad, 1863a, p. 289
- Axinaea idonea* (Conrad), Conrad, 1865a, p. 12; Conrad, 1866a, p. 4
- Pectunculus Broderipii radiatus* de Gregorio, 1890, p. 194, pl. 24 (not pl. 34 as in text), figs. 15, 16
- Glycymeris idonea* (Conrad), Dall, 1898b, p. 607; Harris, 1919, p. 47, pl. 20, figs. 9-11; Harris and Palmer, 1946, p. 49, pl. 12, figs. 4-12; Brann and Kent, 1960, pp. 423, 424

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr. Variations upper Eocene.

*Localities*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type). Jackson variations—MISS.: *Clarke Co.*, Garland Cr.; *Yazoo Co.*, Sims Siding, N. of Yazoo City. LA.: *Grant Par.*, Montgomery, Red R.

*Types*.—Probable syntypes (4), No. 30512 ANSP, Moore, 1962, p. 65

**Glycymeris idonea** (Conrad) subsp.**Glycymerididae**

- Pectunculus idoneus* Conrad, Clark, 1895, p. 5; Clark, 1896, p. 84, pl. 29, figs. 1a-1d, 2 sp. as *Pectunculus* (Aquia fm.)
- Glycymeris idoneus* (Conrad), Clark and Martin, 1901, p. 194, pl. 51, figs. 2, 2a, 3, 3a, 4 (Aquia fm.); Shimer and Shrock, 1944, p. 383
- idonea*, pl. 148, figs. 12, 13 copy Clark and Martin
- May be two subspecies

*Range*.—Paleocene. Aquia fm. Lower Eocene. Nanjemoy fm.

*Localities*.—MD.: *Anne Arundel Co.*, 1 mi. W. of Hardesty; Hardesty; Sheckel's Farm near South R., 2 and 3 mi. S. of South R.; *Prince Georges Co.*, Upper Marlboro; *Charles Co.*, Popes Cr. VA.: *King George Co.*, Woodstock; *Stafford Co.*, Potomac Creek; [*Hanover ?*] *Co.*, Hanoverville

*Types*.—Figured specimens, Clark, 1896; Clark and Martin, 1901, USNM

**Glycymeris idonea** (Conrad) subsp.**Glycymerididae**

- Pectunculus* (n. sp.) Tuomey, 1858, p. 271
- Pectunculus stamineus* (Conrad), Aldrich, 1886, pp. 50, 57, 58
- Pectunculus idoneus* Conrad var., Harris, 1897b, p. 49, pl. 8, figs. 5, 5a, 6; Stewart, 1930, p. 72; Brann and Kent, 1960, p. 673

*Range*.—Lower Eocene. Middle and upper Wilcox [Sabine] gr.

*Localities*.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R.; *Wilcox Co.*, Yellow Bluff, Alabama R. For additional localities see Aldrich, 1886 and Harris, 1897b

*Types*.—Figured specimens (Harris), Nos. 146, 147 PRI

*Glycymeris idoneus* (Conrad), Clark and Martin, 1901

See *Glycymeris idonea* (Conrad) subsp.

**Glycymeris intercostata** (Gabb)

Pl. 1, figs. 1, 2

**Glycymerididae**

- Axinaea intercostata* Gabb, 1860b, p. 402, pl. 68, fig. 2; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4
- Glycymeris intercostata* (Gabb), Dall, 1898b, p. 607 (Oligocene) and *bellascepta* Conrad = *G. arcata* (Conrad)



*Range*.—See locality

*Localities*.—"Alabama" (Gabb); "Texas" (Conrad); "Vicksburgian Oligocene" (Dall)

*Type*.—Holotype, ANSP

**Glycymeris lisbonensis** Harris

**Glycymerididae**

*Glycymeris lisbonensis* Harris, 1919, p. 48, pl. 20, figs. 12-15; cf. Richards in Richards and Palmer, 1953, p. 45, pl. 9, figs. 3, 4; Stenzel Krause, and Twining, 1957, p. 60; Brann and Kent, 1960, p. 425

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr. Cf. Upper Eocene (Richards)

*Localities*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type). MISS.: Clarke Co., Wautubbee, Cf. FLA.: Levy Co., 2.9 mi. S. of Gulf Hammock (Richards)

*Types*.—Syntypes, No. 533-536 PRI

*Glycymeris minor* (Lea)

See *Glycymeris trigonella minor* (Lea)

**Glycymeris petropolitana** Stenzel and Twining

**Glycymerididae**

*Glycymeris petropolitana* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 60, pl. 5, figs. 19-22

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

*Types*.—Holotype, No. 20729 BEG (figs. 19, 22), paratype, No. 20730 BEG (figs. 20, 21), unfigured paratypes, Nos. 20731, 20732 BEG.

**Glycymeris sabinensis** Harris

**Glycymerididae**

*Glycymeris sabinensis* Harris, 1919, p. 51, pl. 21, figs. 8-10; Stenzel, Krause, and Twining, 1957, p. 60, pl. 5, figs. 17, 18; Brann and Kent, 1960, p. 426

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—TEXAS: Sabine Co., Sabine R., Veatch loc. 22 opposite SE.  $\frac{1}{4}$  sec. 35, T. 5 N., R. 13 W., Sabine Par., La. (type)

*Types*.—Syntypes, Nos. 545-547 PRI

**Glycymeris staminea** (Conrad)

**Glycymerididae**

*Pectunculus stamineus* Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 339 as *stramineus* [sic]; Tuomey, 1858, pp. 267, 274; Heilprin, 1884b, p. 87; Harris, 1895b, p. 42

*Pectunculus Broderipii* Lea, 1833, p. 76, pl. 3, fig. 53; Conrad, App. in Morton, 1834, p. 6 = *P. stamineus* Conrad; H. C. Lea, 1849, p. 104; Tuomey, 1858, p. 267; de Gregorio, 1890, p. 193, pl. 24 (not pl. 34 as in text), figs. 4, 5, 7-10, fig. 11 copy Lea, figs. 12-14 not 15, 16 var. *radiatus* de Gregorio see *G. idoneus*; Cossmann, 1893, p. 16; Harris, 1895b, p. 8

*Axinaea staminea* [sic] (Conrad), Conrad, 1865a, p. 12; Conrad, 1866a, p. 4

*Glycymeris staminea* (Conrad), Dall, 1898b, p. 607; Harris, 1919, p. 46, pl. 20, figs. 4-8; Stenzel, Krause, and Twining, 1957, p. 61, text fig. 9; Brann and Kent, 1960, pp. 426, 427

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Possible syntypes, Nos. 30571, 30572 ANSP, Moore, 1962, p. 98

### **Glycymeris trigonella** (Conrad)

### **Glycymerididae**

*Pectunculus trigonella* Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 6 as *trigonellus*; H. C. Lea, 1849, p. 104; Harris, 1895b, p. 46 *trigonellus*

*Pectunculus deltoideus* Lea, 1833, p. 77, pl. 3, fig. 55; Conrad, App. in Morton, 1834, p. 6 as *deltoidea*—*P. trigonellus* Conrad; H. C. Lea, 1849, p. 104; Tuomey, 1858, pp. 267, 274; de Gregorio, 1890, p. 194, pl. 23, figs. not 15, 16, as in Harris, 32—42, fig. 31 copy Lea; pl. 24, figs. 1-3 includes muts. *ignus*, *percuneatus*, and *striatus*; Cossmann, 1893, p. 17 included *minor*; Harris, 1895b, p. 15

*Limopsis trigonella* (Conrad), d'Orbigny, 1850, p. 389

*Azinea trigonella* (Conrad), Conrad, 1865a, p. 12; Conrad, 1866a, p. 4

*Glycymeris trigonella* (Conrad), Dall, 1898b, p. 606; Harris, 1919, p. 49, pl. 21 [not pl. 20 as in text], figs. 1, 2, 4; Stenzel, Krause, and Twining, 1957, p. 60, pl. 5, figs. 11-13; Brann and Kent, 1960, p. 427

*Glycymeris deltoideus* (Lea) vars. *ignus*, *percuneata*, *striatus* (de Gregorio), Harris, 1919, p. 201

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes, Nos. 30568, 30569, 30570 ANSP, Moore, 1962, p. 104. Syntypes, *P. deltoideus percuneatus* (figs. 38-41), No. 26454 De Gregorio Coll., PRI. Holotype, *P. deltoideus ignus* (fig. 36), No. 26453 De Gregorio Coll., PRI

### **Glycymeris trigonella minor** (Lea)

### **Glycymerididae**

*Pectunculus minor* Lea, 1833, p. 77, pl. 3, fig. 54; not Conrad, App. in Morton, 1834, p. 7 = *P. declivis*; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389 under *P. declivis* Conrad; de Gregorio, 1890, p. 195, pl. 23, fig. 30 copy Lea; Cossmann, 1893, p. 17 as *deltoideus* see under *P. trigonella*; Harris, 1895b, p. 28

Not *Pectunculus minor* Lea, Conrad, 1865a, p. 12 see under *Limopsis declivis* (Conrad)

*Glycymeris minor* Lea, Dall, 1898b, p. 606

*Glycymeris trigonella minor* (Lea), Harris, 1919, p. 49, pl. 21 (not pl. 20 as in text), figs. 3, 6, 7 (not 6 on expl. of pl.); Brann and Kent, 1960, pp. 427, 428

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr., Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). LA.: Bienville Par., Hammetts Branch; Lincoln Par., Ruston well (Harris)

*Type*.—Possible holotype, No. 5328 ANSP, Lea Coll.

*Glycymeris trigonella wautubbeana* Harris

See *Glycymeris wautubbeana* Harris

**Glycymeris wautubbeana** Harris**Glycymerididae**

*Glycymeris trigonella* var. *wautubbeana* Harris, 1919, p. 50, pl. 21, figs. 5, 5a; Brann and Kent, 1960, p. 428

*Glycymeris wautubbeana* Harris, Stenzel, Krause, and Twining, 1957, p. 60, pl. 5, figs. 14-16

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: Clarke Co., Wautubbee (type)

*Types*.—Syntypes, Nos. 541, 542 PRI

**Glycymeris** sp.**Glycymerididae**

*Axinea* [sic] *subaustralis* d'Orbigny, Weller, 1907, p. 414, pl. 35, figs. 7, 8. Not d'Orbigny, 1850, p. 243

*Range*.—Lower Eocene. Vincentown fm.

*Locality*.—N. J.: Monmouth Co., near Deal

*Type*.—Figured specimen unknown

**Glycymeris** sp.**Glycymerididae**

*Glycymeris* cf. *anteparilis* Kellum, Harris, 1951, p. 16, pl. 7, figs. 4-7 cf. to species from Miocene, Silverdale, Onslow Co., N. C. (Kellum, 1926, p. 35); Brann and Kent, 1960, p. 421

*Range*.—Upper Eocene. "Ocala ls." Ocala gr.

*Locality*.—GA.: Houston Co., Clinchfield Quarry, W. side Pennsylvania Cement Corporation

*Types*.—Figured specimens, Nos. 24472, 24473, 24474 PRI

**Glycymeris** sp.**Glycymerididae**

*Glycymeris arctatus cookei* Dall, Harris, 1951, p. 17, pl. 7, fig. 12; Brann and Kent, 1960, p. 421

This shell belongs to the group of *G. arctata* (Conrad), 1848 Oligocene and *G. cookei* Dall, 1916 Miocene

*Range*.—Upper Eocene. "Ocala ls." Ocala gr.

*Locality*.—GA.: Dougherty Co., E. side of Flint R. just below dam at junc. with Kinchefoonee Cr., near Albany

*Type*.—Figured specimen No. 24479 PRI

**Glycymeris** sp.**Glycymerididae**

*Glycymeris* sp. Gardner, 1945, p. 133

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: Maverick Co., 3 mi. W. of Farias ranch house on south ranch road

*Type*.—Unfigured specimen probably USNM

**Glycymeris** sp.**Glycymerididae**

*Glycymeris* sp., Gardner, 1945, p. 133

*Range*.—Paleocene. Wills Point fm., upper Midway gr.

*Locality*.—TEXAS: Maverick Co., USGS Sta. 11754, 27 mi. SE. Eagle Pass

*Type*.—Unfigured specimen probably USNM

**Glycymeris** sp.**Glycymerididae**

*Pectunculus* sp., Harris, 1896, p. 53, pl. 4, fig. 3; Brann and Kent, 1960, p. 673 [not Ala. as on p. 673 see localities]

*Range*.—Paleocene. Midway gr.

*Localities*.—ALA.: Wilcox Co., 1½ mi. SW. of Palmer's Mill; between Snow Hill and Allentown at "Hamburg"; ½ mi. W. of Graveyard Hill. GA.: Clay Co., uppermost layer Ft. Gaines. TENN.: Hardeman Co., 5 mi. S. Crainesville (specimen figured, Harris, 1896)

*Type*.—Figured specimen lost prior to 1937 PRI

*Goodallia* ? *americana* Dall

See *Astarte* (*Goodallia* ?) *americana* Dall

*Goodallia nana* (Lea)

See *Microstagon nana* (Lea)

*Gouldia perdita* Conrad, 1865a, p. 10 *nomen nudum* [error]

See *Crassinella pygmaea* (Conrad)

*Gouldia pygmaea* Conrad

See *Crassinella pygmaea* (Conrad)

*Grateloupia moulinsi* var. *symetrica* de Gregorio

See *Gratelupia* (*Cytheriopsis*) *hydana* (Conrad)

***Gratelupia* [*Grateloupia*\*] (*Cytheriopsis*) *hydana* (Conrad) Veneridae**

*Cytherca Hydana* Conrad, 1833b, p. 36, not pl. 19, fig. 2 as in text (Harris reprint, 1893, p. 58, pl. 20, fig. 3); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99 *Hydiana*; d'Orbigny, 1850, p. 381; Harris, 1895b, p. 22

*Gratelupia Moulinsii* Lea, 1833, p. 59, pl. 2, fig. 33; Conrad, App. in Morton, 1834, p. 8 = *Cytherea hydana* Conrad; H. C. Lea, 1849, p. 100; d'Orbigny, 1850, p. 381; de Gregorio, 1890, p. 221, pl. 34, fig. 33 copy Lea; figs. 28-32 var. *symetrica* = young of *G. hydana*, Harris, 1919, p. 201; Harris, 1895b, p. 29 (= *C. hydana* Conrad)

*Cytheriopsis hydana* (Conrad), Conrad, 1865a, p. 7; Conrad, 1865c, p. 146; Tryon, 1884b, p. 179, pl. 115, fig. 29

*Meretrix Dalli* Cossmann, 1893, p. 11, pl. 1, figs. 9, 10 not *Meretrix dalli* Dickerson, 1914 = "*Pitaria* ?" *praeinominata* G. D. Hanna, 1924

*Grateloupia* (*Cytheriopsis*) *hydana* (Conrad), Dall, 1902, p. 348; Dall, 1903a, p. 1239; Palmer, 1927/1929, p. 106, pl. 21, figs. 17, 18, 23, 26, 27; Brann and Kent, 1960, p. 430

*Gratelupia* (*Cytheriopsis*) *hydana* (Conrad), Harris, 1919, p. 152, pl. 47, figs. 12, 13, 13a; Brann and Kent, 1960, p. 430

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Holotype, ANSP, see Palmer, 1927, p. 107; missing 1962, Moore, 1962, p. 65; *Meretrix dalli* Cossmann, holotype, No. 11639, Lab. Géol., Sorbonne, Paris

\**Gratelupia* as written by Desmoulins, 1828, Bull. Hist. Nat. Soc. Linn. Bordeaux, 2 (12), p. 236. Following D'Orbigny, 1852, p. 74 "*Grateloupia*"; Hoernes, 1870, p. 149, name corrected to *Grateloupia* to conform to spelling of Grateloup for whom it certainly was named. The question is whether to consider the spelling a *lapsus* and correct the generic spelling or to follow the original spelling as authors have done.

*Gratelupia Moulinsii* Lea

See *Gratelupia* (*Cytheriopsis*) *hydana* (Conrad)

*Gryphaea bryanii* (Gabb)

See *Ostrea bryani* Gabb

*Gryphaea Bryani* var. *precedens* Whitfield

See *Ostrea bryani* Gabb

*Gryphaea convexa* (Say)

See *Ostrea convexa* Say

*Gryphaea pitcheri* Morton, White, 1882

See *Ostrea* (*Ostrea*) *pulaskensis* (Harris)

*Gryphaea plicatella* Morton

See *Gryphaeostrea vomer plicatella* (Morton)

*Gryphaea thirsae* Gabb

See *Odontogryphaea thirsae* (Gabb)

*Gryphaea vesicularis* Lamarck, Whitfield, 1885

See *Ostrea* sp.

*Gryphaca vomer* Morton

See *Gryphaeostrea vomer* (Morton)

*Gryphaea vomer* Morton, Safford, 1869

See *Ostrea* (*Ostrea*) *pulaskensis* Harris

#### **Gryphaeostrea vomer** (Morton)

#### **Ostreidae**

*Gryphaea vomer* Morton, 1828b, p. 83; Morton, 1828c, p. 198; Morton, 1830a, p. 283; Morton, 1830b, p. 250, pl. 3, figs. 1, 2; Morton, 1834, p. 54, pl. 9, fig. 5; Conrad, 1835b, p. 336; Conrad, 1842b, p. 172; H. C. Lea, 1849, p. 100

*Ostrea vomer* (Morton), de Gregorio, 1890, p. 178, pl. 19, fig. 7 copy Morton

*Ostrea* (*Gryphaeostrea*) *subversa* Conrad, Dall, 1898b, p. 672 in part

*Ostrea* (*Gryphaeostrea*) *vomer* (Morton), Clark and Martin, 1901, p. 193 in part, pl. 50, figs. 4, 4a; Shimer and Shrock, 1944, p. 397 in part, pl. 155, figs. 1, 2 copy Clark and Martin

*Gryphaeostrea vomer* (Morton), Weller, 1907, p. 455, pl. 44, figs. 10, 11; Gardner, 1935, p. 135; Harris and Palmer, 1946, p. 14, pl. 1, figs. 1, 2 copies Clark, 1916, Cretaceous, figs. 3, 4 copies Morton, 1830b, fig. 6; Richards, 1950, p. 15, fig. 62g; Richards in Richards, *et al.*, 1958 p. 113, pl. 21, fig. 3

Complete Cretaceous synonymy is not given.

*Range*.—Upper Cretaceous. Paleocene. Aquia fm.; Hornerstown fm. (type); Kincaid fm. (reworked), Midway gr. Lower Eocene. Vincentown fm.; Manasquan fm.

*Localities*.—N. J.: *Ocean Co.*, New Egypt (type); *Monmouth Co.*, Hornerstown; *Burlington Co.*, Vincentown; *Camden Co.*, Clementon; *Gloucester Co.*, Sewell. MD.: *Prince Georges Co.*, Upper Marlboro. N. C.: *Halifax Co.*, rd. cut on highway 258, about 2 mi. E. of Thelma. TEXAS: *Travis Co.*, ford on Wilbarger Cr., S. of Littig; ½ mi. E. of Travis-Bastrop Co. line on Austin-Bastrop rd.; *Caldwell Co.*, 5 mi. NW. of Lytton Springs; *Guadalupe Co.*, on E. facing slope of the San Marcos R. valley, ½ mi. N. of Staples

*Type*.—Holotype, No. 16167 ANSP



**Gryphaeostrea vomer plicatella** (Morton)**Ostreidae**

*Gryphaea plicatella* Morton, 1833a, p. 293; Morton, 1833b, pl. 9, fig. 4; Morton, 1834, p. 55, pl. 9, fig. 4

*Gryphostrea* [sic] *eversa* (Deshayes), Conrad, 1866a, p. 3 in part, Miss. *Ostrea* (*Gryphaeostrea*) *subversa* Conrad, Dall, 1898b, p. 681 in part *Gryphaeostrea vomer* var. *plicatella* (Morton), Harris and Palmer, 1946, p. 16, pl. 1, figs. 5, 7-13; Brann and Kent, 1960, p. 431

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Localities*.—ALA.: "overlying limestone in Alabama" (type).

MISS.: Clarke Co., 2-3 mi. E. of Shubuta; Choctaw Co., S. of Silas-Waynesboro road, 5 mi. west of Silas

*Type*.—Missing ANSP

*Gryphostrea* [sic] *eversa* "(Deshayes)" [Melleville] Conrad, 1866a

See *Ostrea subversa* Conrad

See *Gryphaeostrea vomer plicatella* (Morton)

*Halonanus* (*Trinacriella*) *cossmanni* (Dall)

See *Nanohalus cossmanni* (Dall)

*Halonanus decicus* (Conrad)

See *Pachecoia* (*Pachecoia*) *decisa* (Conrad)

*Halonanus declivis* (Conrad)

See *Pachecoia* (*Pachecoia*) *declivis* (Conrad)

*Halonanus* (*Trinacriella*) *ellipsis* (Lea)

See *Pachecoia* (*Stenzelia*) *ellipsis* (Lea)

*Halonanus* (*Trinacriella*) *perplanus* (Conrad)

See *Pachecoia* (*Stenzelia*) *perplana* (Conrad)

*Halonanus pulcher* (Gabb)

See *Pachecoia* (*Pachecoia*) *sabinica* (Harris)

See also *Pachecoia* (*Pachecoia*) *pulchra* (Gabb)

*Halonanus pulchrus* (Gabb)

See *Pachecoia* (*Pachecoia*) *pulchra* (Gabb)

"Here" (or *Lucina*) *dolabra* Conrad, Chavan

See *Lucina* (*Recurvella*) *dolabra* Conrad

Here cf. *wacissana* (Dall)

See *Lucina* sp.

Here sp.

See *Lucina* sp.

*Hindsiella donacia* Dall

See *Hindsiella faba donacia* Dall

**Hindsiella faba** Meyer**Sportellidae**

*Hindsiella faba* Meyer, 1886b, p. 82, pl. 1, fig. 25; Dall, 1899, p. 882; Dall, 1900, p. 1136; Harris, 1919, p. 106, pl. 37, fig. 5 copy Meyer

*Kellia faba* (Meyer), de Gregorio, 1890, p. 211, pl. 30, fig. 16 copy Meyer; Cossmann, 1893, p. 12

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638848 USNM

**Hindsia faba donacia** Dall**Sportellidae**

*Hindsia donacia* Dall, 1899, p. 882 listed only

*Hindsia (faba var. ?) donacia* Dall, 1900, p. 1136, pl. 45, fig. 12; Schuchert, et al., 1905, p. 315; Harris, 1919, p. 106, pl. 37, fig. 6 copy Dall

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 155757 USNM

*Hippagus isocardioides* Lea

See *Crenella isocardioides* (Lea)

**Hormomya hamatoides** (Call)**Mytilidae**

*Mytilus hamatoides* Call, 1891, p. 202, text fig.

*Mytilus (Hormomya) hamatoides* Call, Harris and Palmer, 1946, p. 40, pl. 10, figs. 7-9; Wilbert, 1953, p. 98 (as *Harmomya sic*), p. 122; Brann and Kent, 1960, p. 578

*Range*.—Upper Eocene. ? Upper Jackson gr. (type)

*Locality*.—ARK.: St. Francis Co., Little Crow Cr., 2 mi. E. of Forrest City (type)

*Type*.—Unknown

*Idonearca medians* Whitfield

See *Cucullaea vulgaris* Morton

*Isocardia conradi* Gabb

See *Glossus ? conradi* (Gabb)

*Isocardia mediavia* Harris

See *Glossus mediavia* (Harris)

**Isognomon cornelliana** (Harris)**Isognomonidae**

*Perna cornelliana* Harris, 1896, p. 48, pl. 3, figs. 2, 3; Dall, 1898b, p. 668; Brann and Kent, 1960, p. 676

Cf. *Melina* sp. Dall, 1898b, p. 667 "one fossil *Melina* is reported from the Gulf tertiaries in the lowest Eocene".

*Range*.—Paleocene. Clayton fm. (type), lower Midway gr.

*Locality*.—ALA.: Barbour Co., RR. cut 1 1/3 mi. NE. of Clayton (type)

*Types*.—Syntypes, Nos. 52, 53 PRI

**Jupiteria (Ledina) jonesi** Gardner**Nuculanidae**

*Yoldia eborea* (Conrad), Harris, 1896, p. 56 in part. Not *Leda eborea* Conrad, 1860

Not *Leda (Ledina) smirna* Dall, 1898b, pp. 578, 580 as in Gardner, 1929, p. 427

*Leda (Ledina) jonesi* Gardner, 1929, pp. 427, 428, fig. 1 (2 views)

*Range*.—Paleocene. Sucarnoochee cl. (type), Porters Creek fm., upper Midway gr.

*Locality*.—ALA., Sumter Co., Black Bluff, Tombigbee R. (type), sec. 12, [11] T. 16 N., R. 1 W.

*Type*.—Holotype, No. 371067 USNM

**Jupiteria (Ledina) smirna Dall****Nuculanidae**

*Leda eborea* Conrad, 1860, p. 295, pl. 47, fig. 26; not *Nucula eborea* Conrad, 1846a, p. 24 = *N. concentrica* Say, 1824b, p. 141

*Yoldia eborea* (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 4; Harris, 1896, p. 56, pl. 4, fig. 7; Shimer and Shrock, 1944, p. 379, pl. 146, fig. 36 copy Harris, 1896; Brann and Kent, 1960, p. 983

*Leda (Yoldia) eborea* Conrad, de Gregorio, 1890, p. 187, pl. 22, fig. 37 type; ? Harris, 1894b, p. 42

*Leda (Ledina) smirna* Dall, 1898b, pp. 578, 580; Gardner, 1935, p. 121, pl. 6, fig. 11

*Jupiteria smirna* (Dall), Stewart, 1930, pp. 53, 54

*Ledina smirna* Dall, Gardner, 1945, p. 44, pl. 4, fig. 4

*Range*.—Paleocene. Kincaid fm., lower Midway gr.; Wills Point fm., upper Midway gr.; Matthews Ldg. mem. (type), Porters Creek fm., upper Midway gr.

*Localities*.—ALA.: Showalter Coll. = *Wilcox Co.*, Matthews Ldg. fide Gardner, 1935, p. 122 (type). TEXAS: See Gardner, 1935, p. 123

*Type*.—Lost [Showalter Coll.], Gardner, 1935, p. 122

**Katherinella smithvillensis Stenzel and Krause****Veneridae**

*Katherinella smithvillensis* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 135, pl. 16, figs. 4-6, 15, 16 and text fig. 21

*Range*.—Middle Eocene. Viesca mem. (type) Weches fm., middle Claiborne gr.; Stone City beds, middle Claiborne gr.; ? Wheelock mem. and (?) Landrum mem., Cook Mt. fm., upper Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, bluff on right bank of Colorado R. at Smithville (type); *Brazos Co.*, ? mouth of Little Brazos R.; *Burleson Co.*, Stone City Bluff, Brazos R.; ? *Houston Co.*, Hurricane Bayou

*Types*.—Holotype, No. 20540 BEG (figs. 4, 5); paratypes, No. 20543 BEG (fig. 6), No. 20544 BEG (figs. 15, 16)

**Katherinella ? texitrima Stenzel and Krause****Veneridae**

*Katherinella ? texitrima* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 138, pl. 16, figs. 11-14; pl. 22, figs. 15, 16

*Range*.—Middle Eocene. Stone City beds (55 feet from top), middle Claiborne gr.

*Locality*.—TEXAS: *Houston Co.*, bluff on left bank Trinity R., 0.85 mi. air-line distance N. of Alabama Ferry

*Types*.—Holotype, No. 20567 BEG (pl. 22, figs. 15, 16); paratypes No. 20566 BEG (pl. 16, figs. 11, 12); No. 20568 BEG (pl. 16, figs. 13, 14)

**Katherinella trigoniata (Lea)****Pl. 2, figs. 4, 5 Veneridae**

*Cytherea trigoniata* Lea, 1833, p. 67, pl. 2, fig. 44; H. C. Lea, 1849, p. 99; de Gregorio, 1890, p. 218, pl. 34, figs. 15-20; not figs. 14a, b = *C. hatchetigbeensis* Aldrich; fig. 21 copy *trigoniata* Lea; fig. 22 copy *minima* Lea; Harris, 1895b, p. 46

*Cytherea minima* Lea, 1833, p. 68, pl. 2, fig. 45; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 28; Palmer, 1927/1929, p. 214

*Venus trigonata* [sic] (Lea), d'Orbigny, 1850, p. 380 in part

*Dione discoidalis* Conrad, 1865a, p. 6; Conrad, 1866a, p. 7. Not *C. discoidalis* Conrad, 1833b, p. 37 (Harris reprint, 1893, pl. 20, fig. 2)

- Meretrix minima* (Lea), Cossmann, 1893, p. 10  
*Meretrix aequorea trigoniata* (Lea), Cossmann, 1893, p. 10  
*Meretrix trigoniata* (Lea), Harris, 1919, p. 146, pl. 47, figs. 1-3; Brann and Kent, 1960, p. 547  
*Pitaria (Lamelliconcha) trigoniata* (Lea), Palmer, 1927/1929, p. 41, pl. 8, figs. 27, 32; Brann and Kent, 1960, p. 707  
*Pelecypora trigoniata* (Lea), Stewart, 1930, p. 237  
*Pitar trigoniata* (Lea), Harris and Palmer, 1946, p. 95, pl. 21, figs. 4, 5; Harris, 1951, p. 22, pl. 11, fig. 9; Wilbert, 1953, p. 123, pl. 2, figs. 3a, 3b, Arkansas; Brann and Kent, 1960, pp. 694, 695  
*Katherinella trigoniata* (Lea), Stenzel, Krause, and Twining, 1957, p. 138

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr., McBean fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr. Upper Eocene. Moodys Branch fm., and White Bluff fm., lower Jackson gr.

*Localities*.—ALA.: *Monroe Co.*, sand (type) and\* base of Claiborne Bluff, Alabama R.; Hamilton Bluff, Alabama R. GA.: *Clay Co.*, Fort Gaines; *Houston Co.*, 2.9 mi. S. of Perry. S. C.: *Orangeburg Co.*, 5 mi. N. of Orangeburg. ARK.: *St. Francis Co.*, Crow Creek near Forrest City; *Jefferson Co.*, White Bluff, Arkansas R.; *Cleveland Co. LA.*: *Grant Par.*, Montgomery, Red R.

*Types*.—Syntypes?, Nos. 5248, 5249 ANSP

#### ***Katherinella ? trigoniata bastropensis* (Harris)**

**Veneridae**

- ? *Cytherea nuttali* Conrad, 1857, p. 162, pl. 4, fig. 5  
 Not *Caryatis exigua* Conrad, 1871a, p. 201, pl. 11, fig. 3 as in Harris, 1919  
 ? *Cytherea nuttallii* Conrad, Heilprin, 1891a, p. 402 as in Harris, 1919  
 ? *Mysia unguina* Heilprin, 1891a, p. 402 *vide* Harris, 1919, p. 148.  
 Not *Cytherea (Dione) discoidalis* Conrad, Heilprin, 1891a, p. 402 as in Harris, 1919  
*Meretrix trigoniata* var. *bastropensis* Harris, 1919, p. 148, pl. 47, fig. 4, not fig. 5 see *Katherinella* sp., not fig. 6—*Callocardia amichel* Gardner, 1945; Renick and Stenzel, 1931, p. 104 loc. 5 only. For loc. 1 see *Sinodia eocaenica* Stenzel and Krause in Stenzel, Krause, and Twining, 1957. Stenzel, Krause, and Twining, 1957, p. 136 explained mixture of original data; not Brann and Kent, 1960, p. 547 see *Katherinella* ? sp.  
*Callocardia bastropensis* (Harris), Gardner, 1945, p. 117 lectotype designation  
*Pitaria (Lamelliconcha) trigoniata bastropensis* (Harris), Palmer, 1927/1929, p. 42 in part, pl. 8, fig. 17 copy Harris, not synonymy of *P. nuttali*, p. 14

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, "Bastrop River" (type) [Texas Geol. Sur.], station 11 Devil's Eye, Colorado R., localities mixed in Harris, see Gardner, 1945 and Stenzel, Krause, and Twining, 1957. See Harris, 1919, for localities listed

*Type*.—Lectotype, No. 407 old Texas State Mus., pl. 47, fig. 4, Harris, 1919 selected by Gardner, 1945, p. 117. Lost *vide* Stenzel, Krause, and Twining, 1957; Rodda, 1964

**Katherinella trinitatis** Stenzel and Krause**Veneridae**

*Katherinella trinitatis* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 137, pl. 16, figs. 7-10, and text fig. 22

*Range*.—Middle Eocene. Stone City beds, (upper 55 feet) (type), middle Claiborne gr.

*Locality*.—TEXAS: *Houston Co.*, bluff on left bank of Trinity R. at sharp but obtuse bend 0.85 mile air-line distance N. of Alabama Ferry (type)

*Types*.—Holotypes, No. 20555 BEG (figs. 7, 8), paratype, No. 20556 BEG (figs. 9, 10)

**Katherinella ? sp.****Veneridae**

*Meretrix trigoniata bastropensis* Harris, 1919, p. 148 in part, pl. 47, fig. 5; Brann and Kent, 1960, p. 547

*Pitaria (Lamelliconcha) trigoniata bastropensis* (Harris), Palmer, 1927/1929, p. 42, pl. 8, fig. 13 copy Harris

*Range*.—Middle Eocene. Claiborne gr. (for discussion see Stenzel, Krause, and Twining, 1957, p. 136)

*Locality*.—LA.: Sabine R. (see Veatch Survey, 1902, p. 129)

*Type*.—Figured specimen, No. 1192 PRI

*Kellia faba* (Meyer)

See *Hindsella faba* Meyer

**Kellia interstriata** Aldrich    **Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

*Kellia interstriata* Aldrich, 1908b, p. 74, pl. 5, figs. 1, 2

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: *Clarke Co.*, Enterprise (type)

*Type*.—Holotype, missing USNM, 1962

*Kellia prima* Aldrich

See *Bornia prima* (Aldrich)

**Kelliella ? aldrichi** Gardner**Kelliellidae**

*Kelliella ? aldrichi* Gardner, 1935, p. 178, pl. 16, figs. 7, 8

*Range*.—Paleocene. Kincaid fm., lower Midway gr.; Wills Point fm. (type), upper Midway gr.

*Localities*.—TEXAS: *Williamson Co.*, Dry Brushy Creek, 6 mi. S. of Thrall, USGS Sta. 10420 (type); *Bastrop Co.*, directly above bridge over Cedar Creek bridge on Austin-Red Rock rd.; Colorado R., 4 mi. below Webberville; *Caldwell Co.*, Bur. Ec. Geol. Station 12, 4.6 mi. NW. of Lockhart; 1.9 mi. N. of Lockhart

*Type*.—Holotype, No. 370993 USNM

**Kelliella boettgeri** Meyer**Kelliellidae**

*Kelliella ? boettgeri* Meyer, 1886b, p. 83, pl. 3, figs. 15, 15a; not Aldrich, 1886, p. 49; de Gregorio, 1890, p. 211

*Kelliella Boettgeri* Meyer, Dall, 1900, p. 1167

*Kellyella Boettgeri* Meyer, Cossmann, 1893, p. 13

*Kelliella boettgeri* Meyer, Harris, 1920, p. 10, pl. 17, figs. 16-18, text fig 7; Harris and Palmer, 1946, p. 83, pl. 19, figs. 6, 6a; Brann and Kent, 1960, p. 989



*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Jackson (type)

*Types*.—Syntypes, figs. 15, 15a, No. 638850; fig. 15a [top] No. 638851 USNM

**Kelliella ? evansi** Gardner

**Kelliellidae**

*Kelliella ? evansi* Gardner, 1935, p. 177, pl. 16, figs. 5, 6

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: *Uvalde Co.*, 1 foot above bed of Frio R. just above trail from Bob Evans' (Myrick's) apiary USGS Sta. No. 11767 (type)

*Types*.—Syntypes (2), No. 370915 USNM

*Kellyella*

See *Kelliella*

**Kummelia americana** (Gabb)

**Gastrochaenidae**

*Gastrochaena Americana* Gabb, 1860d, p. 393, pl. 68, fig. 20; Whitfield, 1885, p. 203 in part, pl. 26, figs. 17, 18; Meek, 1864, p. 15; Johnson, 1905, p. 18; Weller, 1907, p. 649, pl. 73, fig. 13

*Polorthus americanus* (Gabb), Gabb, 1862b, p. 367 in part; Meek, 1864, p. 16; Stoliczka, 1871, pp. xv, 15 *Polarthus* [sic]; Gabb, 1872, p. 259 in part, pl. 8, fig. 8

*Kummelia americana* (Gabb), Stephenson, 1937, p. 61, text figs. 1-8  
type species *Kummelia*, Stephenson, 1937

*Range*.—Paleocene. Aquia fm. Lower Eocene. Vincentown fm. (type)

*Localities*.—N. J.: Timber Creek (type), border between Camden and Gloucester Cos.; Ocean Co., Crosswicks Cr. 0.7 mi. N. by W. of New Egypt; Burlington Co. (Gabb). MD.: Prince Georges Co., rd. cut just E. of West Branch of Patuxent R., ¾ mi. W. of Oak Grove, 2.6 mi. W. of Leeland

*Types*.—Syntypes, No. 13403 ANSP

*Kymatox* Stenzel and Krause, 1957

See *Pteropsella* Vokes, 1956

*Kymatox lapidosus* (Conrad)

See *Pteropsella lapidosa* (Conrad)

*Kymatox papyrius* (Conrad)

See *Pteropsella papyria* (Conrad)

*Kymatox praelapidosus* Stenzel and Krause

See *Pteropsella praelapidosus* (Stenzel and Krause)

**Laevicardium gardnerae** Cooke

**Cardiidae**

*Cardium* (*Laevicardium*) *gardnerae* Cooke, 1926b, p. 138, figs. 17a, b

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Jackson, Moodys Branch (type)

*Type*.—Holotype, No. 353953 USNM

**Laevicardium (Dinocardium) levyi** Richards**Cardiidae**

*Cardium (Dinocardium) levyi* Richards in Richards and Palmer, 1953, p. 51, pl. 11, fig. 7

*Range*.—Upper Eocene. Inglis fm. (type), lower Ocala gr.

*Locality*.—FLA.: Levy Co., road metal pit 2.9 mi. S. of N. limits of town of Gulf Hammock just SW. of State Road 55 SW.  $\frac{1}{4}$  sec. 34, T. 14 S., R. 16 E. (type)

*Type*.—Holotype, No. I-7568 Fla. Geol. Sur.

**Laevicardium (Dinocardium) palmerae** (Harbison)**Cardiidae**

*Cardium palmerae* Harbison, 1944, p. 5, pl. 2, fig. 7

*Range*.—Middle Eocene. Santee ls. (type), upper Claiborne gr. *fide* Cooke and MacNeil, 1952, p. 20

*Locality*.—S.C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (type)

*Type*.—Holotype, No. 16164 ANSP

*Latiarca gigantea* (Conrad)

See *Cucullaea (Latiarca) gigantea* Conrad

*Latiarca idonea* Conrad

See *Cucullaea (Latiarca) gigantea* Conrad

*Latiarca onochela* Rogers and Rogers

See *Cucullaea (Latiarca) gigantea* Conrad

*Latiarca transversa* (Rogers and Rogers)

See *Cucullaea transversa* Rogers and Rogers

*Leda acala* Dall

See *Calorhadia (Litorhadia) acala* (Dall)

*Leda adrana ? lisbonensis* Aldrich

See *Nuculana magna lisbonensis* (Aldrich)

*Leda aequalis* (Conrad)

See *Calorhadia equalis* (Conrad)

*Leda albaria* (Conrad)

See *Nuculana albaria* (Conrad)

*Leda albirupina* Harris

See *Calorhadia (Litorhadia ?) albirupina* (Harris)

*Leda (Adrana) aldrichiana* Harris

See *Adrana aldrichiana* Harris

*Leda aldrichiana* (Harris) 1897b, 1899b, "var."

See *Calorhadia (Litorhadia) aldrichiana sabinetownensis* (Barry)

*Leda atakta* Gardner

See *Saccella atakta* (Gardner)

*Leda bastropensis* HarrisSee *Calorhadia* (*Litorhadia* ?) *bastropensis* (Harris)*Leda bella* (Conrad)See *Calorhadia bella* (Conrad)*Leda bella* Conrad var.See *Nuculana* "bella (Conrad) var."*Leda Brongnarti* (Lea)See *Nuculana coelata* (Conrad)*Leda calcarensis* (Conrad)See *Nuculana calcarensis* (Conrad)*Leda carolinensis* (Conrad)See *Nuculana carolinensis* (Conrad)*Leda catasarca* DallSee *Saccella catasarca* (Dall)*Leda claibornensis* (Conrad)See *Orthoyoldia claibornensis* (Conrad)*Leda cliftonensis* Clark and MartinSee *Nuculana cliftonensis* (Clark and Martin)*Leda coelata* (Conrad)See *Nuculana coelata* (Conrad)*Leda coelatella* Van WinkleSee *Nuculana coelatella* (Van Winkle)*Leda coelatoides* HarrisSee *Nuculana* (*Hilgardia*) *coelatoides* (Harris)*Leda compsa* GabbSee *Calorhadia* (*Calorhadia*) *compsa* (Gabb)*Leda corpulentoides* (Aldrich)See *Nuculana corpulentoides* (Aldrich)*Leda corpulentoides* (Aldrich) "var."See *Nuculana corpulentoides* (Aldrich) "var."*Leda crassiparva* HarrisSee *Nuculana crassiparva* (Harris)*Leda cultelliformis* (Rogers and Rogers)See *Nuculana cultelliformis* (Rogers and Rogers)*Leda eborea* Conrad, 1860See *Jupiteria* (*Ledina*) *smirna* Dall

*Leda elongatoidea* Aldrich

See *Calorhadia* (*Litorhadia*) *elongatoidea* (Aldrich)

See also *Calorhadia* (*Litorhadia*) *elongatoidea* Aldrich "var." Harris, 1897b in part

See also *Calorhadia* (*Litorhadia*) *aldrichiana* (Harris)

See also *Calorhadia* (*Litorhadia*) *acala* (Dall)

*Leda elongatoidea* Aldrich "var." Harris, 1896

See *Calorhadia* (*Litorhadia*) *elongatoidea* (Aldrich) "var."

*Leda eoa* Gardner

See *Nuculana eoa* (Gardner)

*Leda houstonia* Harris

See *Nuculana trivittata* (Gardner)

See also *Calorhadia houstonia* (Harris)

*Leda improcera* (Conrad)

See *Nuculana improcera* (Conrad)

See also *Nuculana parilis* (Conrad) "var."

*Leda jewetti* Gardner

See *Nuculana jewetti* (Gardner)

*Leda kittensis* Harris

See *Nuculana kittensis* (Harris)

*Leda linifera* (Conrad)

See *Nuculana linifera* (Conrad)

*Leda lisbonensis* Aldrich

See *Nuculana magna lisbonensis* (Aldrich)

*Leda magna* (Lea)

See *Nuculana magna* (Lea)

*Leda magna lisbonensis* Aldrich

See *Nuculana magna lisbonensis* (Aldrich)

*Leda magnopsis* Harris

See *Nuculana magnopsis* (Harris)

*Leda marieana* Aldrich

See *Nuculana marieana* (Aldrich)

*Leda mater* Meyer

See *Calorhadia* (*Calorhadia* ?) *mater* (Meyer)

*Leda media* (Lea)

See *Calorhadia equalis* (Conrad)

*Leda micronata* [sic] Conrad

See *Calorhadia semen* (Lea)

*Leda milamensis* Harris, 1895a not 1896

See *Nuculana milamensis* (Harris)

*Leda milamensis* Harris, 1896, not 1895a

See *Nuculana hannahae* Palmer and Brann, new name

*Leda mucronata* Conrad, 1854, p. 29

See *Calorhadia semen* (Lea)

*Leda multilineata* Conrad

See *Nuculana (Hilgardia) multilineata* (Conrad)

*Leda opulenta* (Conrad)

See *Calorhadia (Calorhadia) opulenta* (Conrad)

*Leda opulenta compsa* Gabb

See *Calorhadia (Calorhadia) compsa* (Gabb)

*Leda opulenta hammetti* Harris

See *Calorhadia (Calorhadia) hammetti* (Harris)

*Leda ozarkola* Harris

See *Nuculana ozarkola* (Harris)

*Leda parilis* (Conrad)

See *Nuculana parilis* (Conrad)

*Leda parva* (Rogers and Rogers)

See *Sacella parva* (Rogers and Rogers)

See also *Sacella robusta* (Aldrich)

*Leda pharcida* Dall

See *Calorhadia (Calorhadia) pharcida* (Dall)

*Leda pistonupis* Harris

See *Calorhadia pistonupis* (Harris)

*Leda plana* (Lea)

See *Nuculana plana* (Lea)

*Leda plicata* (Lea)

See *Calorhadia bella* (Conrad)

*Leda potomacensis* Clark and Martin

See *Calorhadia (Calorhadia) potomacensis* (Clark and Martin)

*Leda protexta* (Conrad), Clark, 1895, p. 5; Clark, 1896, p. 82. Not  
*Nuculana protexta* Conrad, 1865c. Not Gabb, 1860a.

See *Calorhadia (Calorhadia) potomacensis* (Clark and Martin)

*Leda protexta* (Conrad), 1865c

See *Calorhadia (Calorhadia) pharcida* (Dall)

*Leda protexta* Gabb, 1860a, p. 303. Cretaceous



*Leda protexta* Gabb, 1860d, p. 397, not Gabb, 1860a, p. 303  
See *Nuculana saffordana* (Harris)

*Leda pulcherrima* (Lea)  
See *Nuculana plana* (Lea)

*Leda quercollis* Harris  
See *Saccella quercollis* (Harris)

*Leda regina-jacksonis* Harris  
See *Calorhadia* (*Calorhadia*) *reginajacksonis* (Harris)

*Leda robusta* Aldrich  
See *Saccella robusta* (Aldrich)

*Leda saffordana* Harris  
See *Nuculana saffordana* (Harris)

*Leda semen* (Lea)  
See *Calorhadia semen* (Lea)

*Leda semenoides* Aldrich  
See *Calorhadia semenoides* (Aldrich)

*Leda* (*Ledina*) *smirna* Dall  
See *Jupiteria* (*Ledina*) *smirna* Dall

*Leda subtrigona* (Conrad)  
See *Nuculana subtrigona* (Conrad)

"*Leda* (*Nuculana*) *subtrigona* Con. ? S. Carolina" label in ANSP  
fide Harris, 1919  
See *Calorhadia houstonia* (Harris)

*Leda trivitate* Gardner  
See *Nuculana trivitate* (Gardner)

*Leda trumani* Harris  
See *Nuculana trumani* (Harris)

*Leda tysoni* Clark and Martin  
See *Nuculana tysoni* (Clark and Martin)

*Leda vanuxemi* Dall  
See *Nuculana vanuxemi* (Dall)

*Leda wantubbeana* Harris  
See *Nuculana wantubbeana* (Harris)

*Leda*, n. sp. Gardner, 1935  
See *Nuculana* sp.

*Leda* (*Saccella*), n.sp. Gardner, 1935  
See *Saccella* sp.

*Leda* sp. Aldrich, 1886

See *Saccella robusta* (Aldrich)

*Ledina jonesi* Gardner

See *Jupiteria* (*Ledina*) *jonesi* Gardner

*Ledina smirna* (Dall)

See *Jupiteria* (*Ledina*) *smirna* Dall

#### **Ledina** sp.

#### **Nuculanidae**

*Nuculana* sp. Harris and Palmer, 1946, p. 60, pl. 14, figs. 9-11 section

*Ledina*; Brann and Kent, 1960, pp. 609, 610; No. 4239=figs. 9, 10; No. 4240=fig. 11 [not as on pp. 609, 610]

*Range*.—Upper Eocene. Jackson gr. (Harris, 1902, in Harris, Veatch and Pacheco, pp. 25, 273)

*Locality*.—TEXAS: *Hardin Co.*, Sour Lake well, 1500 ft., SE. Texas

*Type*.—Figured specimens, Nos. 4239, 4240 PRI

*Lembulus coelatus* (Conrad)

See *Nuculana coelata* (Conrad)

*Lepton alabamiensis* Aldrich

See *Sportella alabamiensis* (Aldrich)

#### **Lepton vauhani** Aldrich

#### **Leptonidae**

*Lepton vauhani* Aldrich, 1908b, p. 76, pl. 5, fig. 12

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type)

*Type*.—Holotype, No. 639059 USNM

*Leuroactis* Stewart, 1930, described as section

See *Venericardia pilsbryi* Stewart

#### **Lima (Ctenoides) bastropensis** Stenzel and Twining

#### **Limidae**

*Lima (Ctenoides) bastropensis* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 90, pl. 8, figs. 4, 5

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—TEXAS: eastern *Bastrop Co.*, bluff on left bank of Pinoak Cr. next to county road leading N. to Center Union School, 800 ft. N. of right-angle turn of Smithville-Winchester rd., 0.5 mi. S. of Center Union School and 0.6 mi. SW. of Center Union Church, 4.5 mi. by rd. NW. of Winchester (Bur. Ec. Geol. loc No. 11-T-70)

*Type*.—Holotype (left valve), No. 20642 BEG

*Lima dumosa* (Morton), d'Orbigny, 1850

See *Spondylus dumosus* (Morton)

#### **Lima (Ctenoides) harrisiana** Aldrich

#### **Limidae**

*Lima harrisiana* Aldrich, 1910b, p. 74, pl. 4, figs. 10, 11; not Harris 1919, p. 29, pl. 16, fig. 1, 2; Teppner, 1914, p. 25; Harris, 1951, p. 12; not Brann and Kent, 1960, p. 494

*Lima* (*Ctenoides*) *harrisiana* Aldrich, Stenzel, Krause, and Twining, 1957, p. 90

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type)

*Types*.—Syntype fig. 10, No. 639107 USNM; fig. 11 missing

*Lima harrisiana* Aldrich, Harris, 1919

See *Lima* sp.

**Lima (Limatulella) ozarkana Harris**

**Limidae**

*Lima ozarkana* Harris, 1897b, p. 43, pl. 6, fig. 12; Brann and Kent, 1960, p. 495

*Lima* (*Mantellum*) *ozarkana* Harris, Dall, 1898b, p. 769

*Lima* (*Limatulella*) *ozarkana* Harris, Stenzel, Krause, and Twining, 1957, p. 90

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Dale Co.*, Ozark, R.R. cut just beneath the Buhrstone (type)

*Type*.—Holotype, No. 222 PRI

**Lima (Limatulella) petropolitana Stenzel and Twining**

**Limidae**

*Lima* (*Limatulella*) *petropolitana* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 88, pl. 8, figs. 1, 2

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

*Type*.—Holotype (an incomplete double-valve individual), No. 20643 BEG

**Lima (Limatulella) smithvillensis Stenzel and Twining**

**Limidae**

*Lima* (*Limatulella*) *smithvillensis* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 88, pl. 8, fig. 13

*Range*.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. [Bur. Econ. Geol. loc. no. 11-T-2]

*Type*.—Holotype (left valve), No. 20638 BEG

**Lima (Ctenoides) tricinta Harris**

**Limidae**

*Lima tricinta* Harris, 1951, p. 11, pl. 5, fig. 6; Brann and Kent, 1960, p. 495

*Range*.—Upper Eocene. "Ocala ls." (type), Ocala gr.

*Locality*.—GA.: *Dougherty Co.*, Armena Lime Mine, 10 mi. W. of Albany (type)

*Type*.—Holotype, No. 24458 PRI

**Lima vicksburgiana Dall**

**Limidae**

*Lima vicksburgiana* Dall, 1898b, p. 765, pl. 35, fig. 20; Schuchert, et al., 1905, p. 355; Harris, 1951, p. 11, pl. 5, figs. 7, 8; Brann and Kent, 1960, p. 495

*Range*.—Upper Eocene. "Ocala ls." (type), Ocala gr.

*Localities*.—FLA.: Levy Co., Johnson's lime-sink (type); [?] Co., La Penotière's hammock near Orient (Dall); Marion Co., Ocala Lime Rock Corp., abandoned quarry east of Kendrick (Harris)

*Type*.—Holotype, No. 107795 USNM

**Lima sp.**

**Limidae**

*Lima harrisiana* Aldrich, Harris, 1919, p. 29, pl. 16, figs. 1, 2; Stenzel, Krause, and Twining, 1957, p. 91; Brann and Kent, 1960, p. 494. Not Aldrich, 1910b, p. 74

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—LA.: Winn Par., Atlanta Rd. 6 mi. W. of Winnfield, "SE. of the so-called Marble Quarry" [Harris, 1919, p. 29]

*Types*.—Figured specimens, Nos. 465, 466, PRI

**Lima sp.**

**Limidae**

*Lima* sp. Harris, 1951 [no page], pl. 6, fig. 1; Brann and Kent, 1960, p. 495

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—FLA.: Marion Co., Dixie Lime Products Co., Reddick

*Type*.—Figured specimen, No. 24461 PRI

**Limopsis aviculoides (Conrad)**

**Limopsidae**

*Pectunculus aviculoides* Conrad, 1833c, p. 39 (Harris reprint, 1893 p. 65); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389; Harris, 1895b, p. 6

*Pectunculus obliqua* Lea, 1833, p. 78, pl. 3, fig. 57; Conrad, App. in Morton, 1834, p. 7=*P. aviculoides* Conrad; H. C. Lea, 1849, p. 104 [as *obliqua*]; d'Orbigny, 1850, p. 389 under *P. aviculoides*; Harris, 1895b, p. 31

*Limopsis aviculoides* (Conrad), Conrad, 1860, p. 297, pl. 47, fig. 12; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; Heilprin, 1884b, p. 88; de Gregorio, 1890, p. 193, pl. 23, *auriculoides* [sic] fig. 29 copy Conrad; Dall, 1898b, p. 605; Harris, 1919, p. 36, in part, pl. 18, figs. 6, 7 (figs. 1, 3-5=*var. mauricensis*) fig. 2 var.; Harris and Palmer, 1946, p. 51, pl. 12, fig. 17 (same as Harris, 1919, pl. 18, fig. 7); Brann and Kent, 1960, p. 496

*Pectunculus Broderipii* Lea, de Gregorio, 1890, p. 193 in part, pl. 24 (not pl. 34 as in text), only fig. 6 copy Lea *P. obliqua*

*Limopsis obliqua* (Lea), Cossmann, 1893, p. 16

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Probable holotype, No. 30538 ANSP Moore, 1962, p. 41. *P. obliqua* holotype, No. 5377 ANSP fide Harris, 1946

**Limopsis aviculoides mauricensis Harris**

**Limopsidae**

*Limopsis aviculoides* (Conrad), Harris, 1919, p. 36 in part, pl. 18, figs. 1, 3-5; Brann and Kent, 1960, p. 495

*Limopsis aviculoides* var. *mauricensis* Harris in Harris and Palmer, 1946, p. 61, pl. 12, figs. 18, 19 (same as Harris, 1919, pl. 18, figs. 3, 4); Brann and Kent, 1960, p. 496

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.  
*Locality*.—LA.: Winn Par., St. Maurice (type)  
*Types*.—Holotype, No. 492; paratypes, Nos. 489, 491, 493 PRI

**Limopsis aviculoides (Conrad) "var."**

**Limopsidae**

*Limopsis aviculoides* (Conrad), Harris, 1919, p. 36 in part, pl. 18, fig. 2; Brann and Kent, 1960, p. 496

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Localities*.—MISS.: Newton Co., Hickory; Clarke Co., Wautubbee, 8 mi. NE. of Enterprise. LA.: Winn Par.; Winnfield; Sabine Par., Sabine R., SE. corner T. 5 N., R. 13 W.

*Type*.—Figured specimen, No. 490 PRI

*Limopsis corbuloides* (Conrad)

See "*Pectunculus*" *corbuloides* Conrad

*Limopsis cossmanni* Dall

See *Nanohalus cossmanni* (Dall)

*Limopsis cuneus* (Conrad)

See *Trinacria cuneus* (Conrad)

*Limopsis decisis* (Conrad)

See *Pachecoia* (*Pachecoia*) *decisa* (Conrad)

See also *Pachecoia* (*Pachecoia*) *pulchra* (Gabb)

*Limopsis declivis* (Conrad)

See *Pachecoia* (*Pachecoia*) *declivis* (Conrad)

*Limopsis declivis* (Conrad), de Gregorio, 1890, in part

See *Pachecoia* (*Pachecoia*) *decisa* (Conrad) "var."

*Limopsis ellipsis* (Lea)

See *Pachecoia* (*Stenzelia*) *ellipsis* (Lea)

*Limopsis* (*Trigonocallia*) *ledoides* (Meyer)

See *Pachecoia* (*Pachecoia* ?) *ledoides* (Meyer)

*Limopsis obliqua* (Lea)

See *Limopsis aviculoides* (Conrad)

*Limopsis pectuncularis* (Lea)

See *Pachecoia* (*Pachecoia* ?) *pectuncularis* (Lea)

*Limopsis perplana* Cossmann, 1893, not Conrad

See *Nanohalus cossmanni* (Dall)

*Limopsis perplanus* (Conrad)

See *Pachecoia* (*Stenzelia*) *perplana* (Conrad)

*Limopsis pulcher* (Gabb), Heilprin, 1891a, p. 403

See *Pachecoia* (*Pachecoia*) *pulchra* (Gabb)

See also under *Pachecoia* (*Pachecoia*) *microcancellata* (Barry)

**Limopsis quihi Gardner**

**Limopsidae**

*Limopsis quihi* Gardner, 1935, p. 124, pl. 6, figs. 5-8

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.



*Localities*.—TEXAS: *Medina Co.*, USGS Sta. 11876, 1 mi. E. of Quihi (type); USGS Sta. 11770 Hondo R. bed, 1 mi. NE. of New Fountain; *Uvalde Co.*, USGS Stas. 6279 and 11765, 11 mi. S. of Sabinal and a few hundred yds. S. of junction of Elm Cr. with Sabinal Cr. on Schuddemagen ranch

*Type*.—Holotype, No. 370905 USNM

#### **Limopsis radiata** Meyer

#### **Limopsidae**

*Limopsis radiatus* Meyer, 1885a, p. 459; Meyer, 1886b, p. 80, pl. 3, figs. 17, 17a; Cossmann, 1893, p. 16; Dall, 1898b, p. 605; Harris and Palmer, 1946, p. 51, pl. 12, figs. 13-16; pl. 13, figs. 1, 2; Brann and Kent, 1960, p. 497

Not *Pectunculus Broderipii radiatus* de Gregorio, 1890, p. 194, pl. 24 (not 34 as in text), figs. 15, 16

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type); Town Cr., Jackson. LA.: *Caldwell Par.*, Gibson Ldg., Ouachita R.: Bunker Hill Ldg., Ouachita R.

*Type*.—Holotype, No. 638696 USNM. Specimen labeled type; "type lot" on label.

*Limopsis trigonella* (Conrad)

See *Glycymeris trigonella* (Conrad)

#### **Limopsis** sp.

#### **Limopsidae**

*Limopsis* sp. Gardner, 1935, p. 125

*Range*.—Paleocene. Kincaid fm., lower Midway gr.; Wills Point fm., upper Midway gr.

*Localities*.—TEXAS: *Bastrop Co.*, glauconitic red sand below rock ledge, directly above bridge over Cedar Creek on Austin-Red Rock road USGS Sta. 12109; right bank Colorado R., 4 mi. below Webberville, USGS Sta. 5280

*Type*.—Unfigured specimen not found USNM, 1962

*Linearia* ? *divaricata* Johnson

See *Sportella* ? *divaricata* (Johnson)

#### **Linga** ? (*Cavilinga*) *amica* (de Gregorio)

#### **Lucinidae**

*Lucina amica* de Gregorio, 1890, p. 204, pl. 28, figs. 1, 2; Dall, 1903a, p. 1364 in part; Harris, 1919, p. 111, pl. 37, figs. 22, 23 copy de Gregorio, questions the specimen from Claiborne

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr. (locality questionable, Harris)

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type) (locality questionable)

*Type*.—Holotype, lost, formerly De Gregorio Coll., Univ. of Palermo, Palermo, Sicily

#### **Linga carinifera** (Conrad)

#### **Lucinidae**

*Lucina carinifera* Conrad, 1833c, p. 40 (Harris reprint, 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 402, pl. 4, fig. 15; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386; Tuomey, 1858, p. 266; Conrad, 1866a, p. 6; de Gregorio, 1890, p. 204, pl. 29, fig. 9 copy *L. cornuta* Lea; fig. 10 copy Conrad; Cossmann, 1893,

- p. 11 *Linga*; Harris, 1895b, p. 10; Harris, 1919, p. 114, pl. 37, fig. 25 copy Conrad; fig. 26 copy *L. cornuta* Lea; figs. 27-29; Stewart, 1930, p. 178 type species new section *Quasilucina*; Brann and Kent, 1960, pp. 504, 505
- Lucina cornuta* Lea, 1833, p. 56, pl. 1, fig. 29; Conrad, App. in Morton, 1834, p. 7 (= *L. carinifera*); H. C. Lea, 1849, p. 101; Harris, 1895b, p. 13 (= *L. carinifera* Conrad)
- Cyclas carinifera* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8
- Phacoides* (Here) *carinifera* (Conrad), Dall, 1903a, p. 1364 includes *Lucina cornuta* Lea
- Linga carinifera* (Conrad), Chavan, 1937, pp. 148-151, *Quasilucina* Stewart, 1930=*Linga* de Gregorio, 1885, p. 217

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes (2), No. 30521 ANSP Moore, 1962, p. 45

### ***Linga hamata* (Dall)**

### **Lucinidae**

- Phacoides* (Here) *hamatus* Dall, 1903a, p. 1364, pl. 50, fig. 9; Schuchert, et al., 1905, p. 496; Chavan, 1937, pp. 148, 149= ? *Linga carinifera* (Conrad)
- Lucina hamatus* (Dall), Harris, 1919, p. 112, pl. 37, fig. 24 copy Dall, questions locality
- "*Phacoides*" *hamatus* Dall, Stewart, 1930, p. 178

*Range*.—Middle Eocene. Cook Mt. fm. (upper Lisbon fm.) (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 129633 USNM

### ***Linga* (Cavilinga) *pomilia* (Conrad)**

### **Lucinidae**

- Lucina pomilia* Conrad, 1833c, p. 40, (Harris reprint, 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 402, pl. 4, fig. 17; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386 as *pumilia*; Conrad, 1866a, p. 6; not Aldrich, 1886, p. 57; de Gregorio, 1890, p. 206, pl. 29, figs. 11, 12 copies Conrad; Harris, 1895b, p. 36; Harris, 1897b, p. 70 in part, not pl. 14, figs. 3, 3a, 3b; Harris, 1919, p. 115, pl. 38, figs. 6-11; Brann and Kent, 1960, pp. 510, 511
- Lucina impressa* Lea, 1833, p. 37, pl. 1, fig. 30; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386 under *L. pumilia*; Conrad, 1866a, p. 6; de Gregorio, 1890, p. 203, pl. 28, figs. 3-9, 15 copy Lea; Cossmann, 1893, p. 12 in part; Harris, 1895b, p. 22 (= *L. pomilia* Conrad)
- Cyclas pomilia* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8
- Cyclas impressa* (Lea), Conrad, 1865a, p. 8
- Lucina impressa* var. *postsulcata* de Gregorio, 1890, p. 203, pl. 28, fig. 14; Harris, 1919, p. 201 individual variation
- Lucina impressa* var. *sublaevigata* de Gregorio, 1890, p. 203, pl. 28, figs. 10-11; Harris, 1919, p. 201 *L. parilis* error
- Linga* (Cavilinga) *pomilia* (Conrad), Chavan, 1937, pp. 148, 149, 151, 200; Chavan, 1938, p. 217, with *L. impressa* Lea as var.

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes (4), No. 30524, Moore, 1962, p. 88. Holotype *L. impressa* No. 5155 ANSP. Holotype *L. impressa sublaevigata* de Gregorio, No. 26455 De Gregorio Coll., PRI

**Linga (Cavilinga) pomilia alveata** (Conrad)

**Lucinidae**

- Lucina alveata* Conrad, 1833c, p. 40 (Harris reprint 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 402, pl. 4, fig. 12; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386; de Gregorio, 1890, p. 204, pl. 28, fig. 20 copy Conrad; Harris, 1895b, p. 4  
*Lucina lunata* Lea, 1833, p. 58, pl. 1, fig. 32; Conrad, App. in Morton, 1834, p. 7=*L. alveata* Conrad; H. C. Lea, 1849, p. 101; Harris, 1895b, p. 26=*L. alveata* Conrad  
*Cyclas alveata* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8  
*Lucina impressa* var. *subcuneata* de Gregorio, 1890, p. 203, pl. 28, figs. 12, 13  
*Lucina pomilia alveata* Conrad, Harris, 1919, p. 115, pl. 38, figs. 12-16; Brann and Kent, 1960, p. 511  
*Linga (Cavilinga) pomilia alveata* (Conrad), Chavan, 1937, pp. 151, 200; Chavan, 1938, p. 217

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes, *L. alveata* Conrad, No. 30510 ANSP Moore, 1962, p. 37. Syntypes *L. lunata* Lea, Nos. 5179, 5180 ANSP. Holotype, *L. impressa subcuneata* de Gregorio, No. 26452 De Gregorio Coll. PRI

**Linga (Cavilinga) pomilia smithi** (Meyer)

**Lucinidae**

- Lucina Smithi* Meyer, 1886b, p. 81, pl. 1, fig. 23; de Gregorio, 1890, p. 207, pl. 28, fig. 16 copy Meyer; not Shimer and Shrock, 1944, p. 423; pl. 168, fig. 24 copy Clark and Martin=*L. whitei* Clark  
*Lucina pomilia* Conrad, Harris, 1897b, p. 70, pl. 14, figs. 3, 3a, 3b; Brann and Kent, 1960 p. 510, Nos. 223, 224 only  
*Phacoides (Parvilucina) Smithi* (Meyer), Dall, 1903a, p. 1381 in part  
*Lucina pomilia smithi* Meyer, Harris, 1919, p. 114, pl. 38, figs. 1 copy Meyer, 2-5; Brann and Kent, 1960, p. 511  
*Linga (Cavilinga) pomilia Smithi* (Meyer), Chavan, 1937, p. 200

*Range*.—Lower Eocene. Nanjemoy fm.; Bashi mem., Hatchetigbee fm, upper Wilcox [Sabine] gr. Middle Eocene. Gosport sd. ("type") uppermost Claiborne gr.

*Localities*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.; Monroe Co., Claiborne Bluff, Alabama R. (type). VA.: Hanover Co., Newcasttle, S. side of Pamunkey R., ¾-1 mi. E. of bridge on U.S. 360

Meyer gave Claiborne [Gosport sand] as type locality. Harris stated and illustrated that specimens from the Wilcox (Sabine) shells compare better with Meyer's figure.

*Type*.—Holotype, No. 638846 USNM

**Lirodiscus jacksonensis** (Meyer)

**Astartidae**

- Astarte parilis* Conrad in Wailes, 1854, p. 289, pl. 14, fig. 2 figured only (reprint, 1939, p. 19, pl. 1, fig. 2); Conrad, 1865a, p. 9; Conrad, 1866a, p. 23; not *Astarte parilis* Conrad, 1853a, p. 276 (Dall reprint,

- 1909, p. 161=Monmouth Co., N.J. Cretaceous); Hilgard in Hopkins, 1871, p. 11  
*Astarte sulcata* var. *jacksonensis* Meyer, 1885a, p. 460 (incomplete description)  
*Lirodiscus Wailesii* Dall, 1903a, p. 1483, pl. 57, fig. 21; Schuchert, et al., 1905, p. 368  
*Astarte (Lirodiscus) jacksonensis* Meyer, Harris and Palmer, 1946, p. 77, pl. 18, figs. 1-5, 8-10; Brann and Kent, 1960, p. 93  
*Lirodiscus jacksonensis* (Meyer), Harris, 1951, p. 20, pl. 10, fig. 5; Brann and Kent, 1960, p. 499

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.; Crystal R. fm., upper Ocala gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson, Moodys Branch (type). ARK.: *Cleveland Co.*, Vince Ferry, Saline R. LA.: *Caldwell Par.*, Gibson Ldg., Ouachita R.; *Grant Par.*, Montgomery, Red R. TEXAS: *Sabine Co.*, Robinson's Ferry, Sabine R. FLA.: *Marion Co.*, dump SW. of office and mill Dixie Lime Products Co., Reddick

*Types*.—Syntypes (2), No. 638698 USNM, "type lot" on label. Possible holotype *Astarte parilis* Conrad, No. 13186 ANSP Moore, 1962, p. 83. Holotype *Lirodiscus wailesii* Dall, No. 1566 USNM

#### **Lirodiscus mediavia (Harris)**

#### **Astartidae**

*Astarte smithvillensis* var. *mediavia* Harris, 1896, p. 61 in part, pl. 5, fig. 4

*Range*.—Paleocene. Matthews Ldg. beds (type), uppermost Porters Cr. fm., upper Midway gr.

*Localities*.—ALA.: *Choctaw Co.*, Naheola Ldg., Tombigbee R.; *Wilcox Co.*, Matthews Ldg., Alabama R. (type locality ?)

*Type*.—Holotype, No. 6234 ANSP

#### **Lirodiscus protractus (Meyer)**

#### **Astartidae**

*Astarte protracta* Meyer, 1886b, p. 80, pl. 3, figs. 18, 18a; Cossmann, 1893, p. 13; Dall, 1900, p. 1199, pl. 43, fig. 3 figured only; Schuchert, et al., 1905, p. 69 = *Lirodiscus protractus* (Meyer)

*Lirodiscus protractus* (Meyer), Dall, 1903a, p. 1484 in part; Schuchert, et al., 1905, p. 368; Harris, 1919, p. 90, pl. 32, figs. 2, 2a copies Meyer, fig. 3 copy Dall

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: *Clarke Co.*, Enterprise "upper bed", Meyer (type). ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. *vide* Dall, 1900, p. 1199

*Type*.—Holotype, No. 638845 USNM

#### **Lirodiscus (Crustuloides) psychopterus (Dall)**

#### **Astartidae**

*Crassatellites (Scambula) psychopterus* Dall, 1900, p. 1198, pl. 42, figs. 8, 9 (figured only); Dall, 1903a, p. 1470; Schuchert, et al. 1905, p. 175

*Lirodiscus (Crustuloides) psychopterus* (Dall), Harris, 1919, p. 89, pl. 32, figs. 1, 1a, 1b; Brann and Kent, 1960, p. 499

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr. *Localities*.—MISS.: *Clarke Co.*, Wautubbee (type); [?] Co., "Johnson's place" (location unknown)

*Type*.—Holotype, No. 107451 USNM



**Lirodiscus santeensis** Harbison**Astartidae**

*Lirodiscus santeensis* Harbison, 1944, p. 4, pl. 2, fig. 3

*Range*.—Middle Eocene. Santee ls. (type), upper Claiborne gr. (*fide* Cooke and MacNeil, 1952, p. 20)

*Locality*.—S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (type)

*Type*.—Holotype, No. 16144 ANSP

**Lirodiscus smithvillensis** (Harris)**Astartidae**

*Astarte conradi* Buckley, 1874, p. 63 *fide* Harris, 1895a, p. 48. Not *A. conradi* Dana, 1863

*Crassatella alta* Conrad (young), Heilprin, 1884b, p. 38 *fide* Harris, 1895a, p. 48. See Stenzel, Krause, and Twining, 1957, p. 126 = *Kymatox lapidosus* (Conrad), see *Pteropsella lapidosa* (Conrad)

*Astarte tellinoides* Conrad, Heilprin, 1891a, p. 402

*Astarte smithvillensis* Harris, 1895a, p. 48, pl. 1, figs. 8, 8a, 9, a-c

*Astarte smithvillensis* Harris "var.", Harris, 1897a, p. 475 in part, not pl. 20, fig. 6; Harris, 1897b, p. 56, in part description and synonymy only, not pl. 11, fig. 2; Brann and Kent, 1960\*, pp. 93, 94 read "figured specimens" for "syntypes"

Not *Astarte smithvillensis* Harris, 1899b, p. 302, pl. 53, fig. 7 see *Lirodiscus smithvillensis* "var." Harris

*Lirodiscus smithvillensis* (Harris), Harris, 1919, p. 89, pl. 31, figs. 17-23; Brann and Kent, 1960, p. 499

*Range*.—Middle Eocene. Reklaw fm., lower Claiborne gr.; Weches fm. (type), middle Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type); Devil's Eye, Colorado R., 8 mi. SE. of Bastrop; *Nacogdoches Co.*, 15 mi. SE. of Nacogdoches; *Burleson Co.*, Colliers Ferry, Brazos R.

*Type*.—Not found 1962, Bur. Ec. Geol., Univ. of Texas

**Lirodiscus smithvillensis** "var." (Harris)**Astartidae**

*Astarte smithvillensis* var. Harris, 1897a, p. 475 in part, pl. 20, fig. 6; Harris, 1897b, p. 56 in part, pl. 11, fig. 2 same as Harris, 1897a; Harris, 1899b, p. 302, pl. 53, fig. 7 same as Harris, 1897a, and 1897b

*Range*.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R.; *Dale Co.*, Ozark. LA.: *Sabine Par.*, La Nana Bayou, near Many (Harris)

*Type*.—Figured specimen, ANSP

**Lirodiscus tellinoides** (Conrad)**Astartidae**

*Astarte tellinoides* Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 8; Conrad, 1835a, Harris reprint, 1893, pl. 19, fig. 2; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 382, Tuomey, 1850, p. 148 *cellinoides sic*; Tuomey, 1858, pp. 264, 273; Conrad 1865a, p. 9; Conrad, 1866a, p. 5; not Aldrich, 1886, p. 53; Harris, 1895b, p. 44

*Astarte Nicklinii* Lea, 1833, p. 61, pl. 2, fig. 35; Conrad, App. in Morton, 1834, p. 8 = *A. tellinoides* Conrad; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 382 under *tellinoides*; Conrad, 1865a, p. 9 under *tellinoides*; de Gregorio, 1890, p. 199, pl. 27, figs. 6-11; fig. 12 copy Lea *A. sulcata*; fig. 13 copy Lea; figs. 14-19; Cossmann, 1893, p. 13; Harris, 1895b, p. 30 (= *A. tellinoides* Conrad)



*Astarte sulcata* Lea, 1833, p. 62, pl. 2, fig. 36; Conrad, App. in Morton, 1834, p. 8 (= *A. tellinoides* Conrad); H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 382 (= *A. tellinoides*); Conrad, 1865a, p. 9 under *tellinoides*; Harris, 1895b, pp. 39, 44 (= *A. tellinoides* Conrad)

*Lirodiscus tellinoides* (Conrad), Conrad, 1869c, p. 47; Dall, 1903a, p. 1483; Dall, 1903b, p. 935; Harris, 1919, p. 90, pl. 32, figs. 4-11; Gardner, 1945, p. 89; Harris and Palmer, 1946, p. 78, pl. 18, fig. 6 same as Harris, 1919, pl. 32, fig. 9; Brann and Kent, 1960, pp. 499, 500

*Astarte Nicklinii ebla* de Gregorio, 1890, p. 199

*Lirodiscus tellinoides ebla* (de Gregorio), Harris, 1919, p. 200

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type); Rock Branch, near Monroeville (Tuomey)

*Types*.—Possible syntypes (6), No. 30563 ANSP Moore, 1962, p. 101

*Lirodiscus tellinoides ebla* (de Gregorio)

See *Lirodiscus tellinoides* (Conrad)

#### **Lirodiscus tellinoides scutellarius** Harris

**Astartidae**

*Astarte* (*Lirodiscus*) *tellinoides scutellaria* Harris in Harris and Palmer, 1946, p. 78, pl. 18, fig. 7; Brann and Kent, 1960, p. 500

*Range*.—Upper Eocene. *Scutella* bed (type), Jackson gr.

*Locality*.—ALA.: Monroe Co., *Scutella* bed at Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 4295, PRI

#### **Lirodiscus virginianus** Van Winkle

**Astartidae**

*Lirodiscus virginianus* Van Winkle, 1921, p. 8, pl. 1, fig. 1; Brann and Kent, 1960, p. 500

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Locality*.—VA.: Hanover Co., Newcastle, S. side Pamunkey R., ¾-1 mi. E. of bridge on U. S. 360 (type)

*Type*.—Holotype, No. 295 PRI

*Lirodiscus wailesii* Dall

See *Lirodiscus jacksonensis* Meyer

#### **Cf. Lirodiscus** sp.

**Astartidae**

*Astarte* sp. Harris and Palmer, 1946, p. 76, pl. 18, figs. 15, 16; Brann and Kent, 1960, p. 94

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

*Locality*.—LA.: Grant Par., Montgomery Ldg., Red R.

*Type*.—Figured specimen, No. 4299 (lost) PRI

*Lithodomus claibornensis* Conrad

See *Lithophaga claibornensis* (Conrad)

*Lithodomus gainesensis* Harris

See *Lithophaga gainesensis* (Harris)

*Lithodomus inflatus* Whitfield

See *Modiolus subinflatus* (Whitfield)

*Lithodomus petricoloides* (Lea)See *Lithophaga* ? *petricoloides* (Lea)*Lithodomus politus* Tuomey, 1848, p. 154; Harris, 1919, p. 201 *nomen nudum***Cf. *Lithophaga claibornensis* (Conrad)****Mytilidae***Lithodomus claibornensis* Conrad, 1848b, p. 132, pl. 14, fig. 7; de Gregorio, 1890, p. 185, pl. 22, fig. 3 copy Conrad; Harris, 1895b, p. 11; Aldrich, 1895b, p. 17, pl. 5, fig. 14*Lithophaga claibornensis* (Conrad), Conrad, 1865a, p. 11; Conrad, 1866a, p. 5; Dall, 1898b, p. 801; Harris, 1919, p. 34, pl. 17, fig. 10 copy Aldrich, fig. 11 copy Conrad*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)*Types*.—Syntypes (2), No. 30663 ANSP Moore, 1962, p. 47***Lithophaga gainesensis* (Harris)****Mytilidae***Lithodomus gainesensis* Harris, 1896, p. 50, pl. 3, figs. 7, 7a; Brann and Kent, 1960, p. 501*Lithophaga gainesensis* (Harris), Dall, 1898b, p. 801, ? *Botula**Range*.—Paleocene. Uppermost ls. beds Midway gr. exposed at Ft. Gaines (type)*Locality*.—GA.: Clay Co., Fort Gaines (type)*Types*.—Syntypes, Nos. 57, 58 PRI*Lithophaga* ? *houstonia* (Harris)See *Mauricia houstonia* (Harris)**Cf. *Lithophaga marylandica* Clark and Martin****Mytilidae***Solemya petricoloides* (Lea), Clark, 1895, p. 5; Clark, 1896, p. 74"Not *Byssomya petricoloides* Lea, 1833", Clark and Martin, 1901, p. 186*Lithophaga marylandica* Clark and Martin, 1901, p. 186, pl. 43, fig. 7*Range*.—Paleocene. Aquia fm. (type)*Localities*.—MD.: Charles Co., Clifton Beach (type). VA.: King George Co., Woodstock*Type*.—Holotype, USNM***Lithophaga* ? *petricoloides* (Lea)****Mytilidae***Byssomya petricoloides* Lea, 1833, p. 48, pl. 1, fig. 16; H. C. Lea, 1849, p. 97; de Gregorio, 1890, p. 236, pl. 38, fig. 25 copy Lea; Cossmann, 1893, p. 5 genus ? Harris, 1895b, p. 34*Lithodomus petricoloides* (Lea), de Gregorio, 1890, p. 184, pl. 22, figs. 6 copy Lea, figs. 7a, 7b; Cossmann, 1893, p. 17 = *L. claibornensis* Conrad ?Not *Solemya petricoloides* (Lea), Clark, 1895, p. 5; Clark, 1896, p. 74 = Cf. *Lithophaga marylandica* Clark and Martin*Lithophaga petricoloides* (Lea), Dall, 1898b, p. 801; Harris, 1919, p. 34, pl. 17, figs. 12, 13 copies De Gregorio*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)*Type*.—Holotype, No. 5074 ANSP

**Lithophaga sp.****Mytilidae**

*Lithophaga* sp. Gardner, 1935, p. 148

*Range*.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: Uvalde Co., Frio R.,  $\frac{1}{2}$  and  $\frac{3}{4}$  mi. NW. of the Evans' (Myrick's) apiary

*Type*.—Unfigured specimen not found USNM, 1962

*Lopha* Roeding (Bolten), 1798, p. 168 is used by authors for *Alec-tryonia* Fischer von Waldheim, 1807, p. 269. Same type species *O. cristigalli* Linné

See Stenzel, 1947, p. 177

*Loripes subvexa* Conrad

See *Eophysema subvexa* (Conrad)

See also "*Anodontia* ?" *augustana* Gardner

See also "*Lucina*" *sylvaerupis* Harris

*Loripinus ozarkanus* (Harris)

See *Eophysema ozarkana* (Harris)

*Loripinus* (*Eophysema*) *subvexa* (Conrad)

See *Eophysema subvexa* (Conrad)

*Lucina alveata* Conrad

See *Linga* (*Cavilinga*) *pomilia alveata* (Conrad)

*Lucina amica* de Gregorio

See *Linga* (*Cavilinga*) *amica* (de Gregorio)

*Lucina aquiana* Clark

See cf. *Saxolucina aquiana* (Clark)

**Lucina ? astartiformis Aldrich****? Lucinidae**

? *Lucina astartiformis* Aldrich, 1897a, p. 15, pl. 5, figs. 1, 1a; Harris, 1897b, p. 72, pl. 14, figs. 8, 8a copy Aldrich; Clark and Martin, 1901, p. 175, pl. 37, figs. 2, 2a

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.; Nanjemoy fm.

*Localities*.—ALA.: Clarke Co., Choctaw Corner (type). MD.: Prince Georges Co., Upper Marlboro (deep cut near Chesapeake Beach R. R. Sta.); 1 mi. SE. of Piscataway

*Type*.—Holotype, No. 638997 USNM

**Lucina atoma Casey****Lucinidae**

*Lucina atoma* Casey, 1902a, p. 716

*Range*.—Upper Eocene. Jackson gr. (type) (or Vicksburg Oligocene)

*Locality*.—LA.: Grant Par., Kimbrel's about  $1\frac{1}{2}$  mi. below Montgomery, Red R. (type)

*Types*.—Syntypes (3), No. 639011 USNM

**"Lucina" bisculpta Meyer****Lucinidae**

*Lucina bisculpta* Meyer, 1886b, p. 81, pl. 1, figs. 30, 30a; de Gregorio, 1890, p. 207, pl. 28, figs. 17, 18 copy Meyer; Dall, 1903a, p. 1364 =

*Phacoides* (*Here*) *pomilius* (Conrad) in part; Cossmann, 1893, p. 12

*Lucina* ?; Harris, 1919, p. 117, pl. 38, figs. 22, 23 copy Meyer, "var. of *L. papyracea*"

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638847 USNM

*Lucina carinifera* Conrad

See *Linga carinifera* (Conrad)

*Lucina claibornensis* (Conrad)

See *Saxolucina (Plastomiltha) claibornensis* (Conrad)

*Lucina claytonia* Harris

See *Saxolucina claytonia* (Harris)

*Lucina compressa* Lea

See *Eomiltha pandata* (Conrad)

*Lucina convexa* Dall, Harris, 1919, p. 118 typographical error for *L. subvexa* Conrad

*Lucina cornuta* Lea

See *Linga carinifera* (Conrad)

*Lucina curta* (Conrad)

See *Myrtea ? curta* (Conrad)

See also *Lucina (Callucina) uhleri* Clark

## **Lucina dartoni** Clark

## **Lucinidae**

*Lucina dartoni* Clark, 1895, p. 5; Clark, 1896, p. 79, pl. 20, figs. 2a-c; Clark and Martin, 1901, p. 175, pl. 37, figs. 3, 3a, 3b holotype

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—MD.: Charles Co., Popes Cr.; 2½ mi. above Popes Cr.

VA.: King George Co., Woodstock (type)

*Type*.—Holotype, USNM

*Lucina dartoni* Harris, 1919, not Clark

See *Eophysema ozarkana* (Harris)

## **Lucina (Recurvella) dolabra** Conrad

## **Lucinidae**

*Lucina dolabra* Conrad, 1833a, p. 343; Conrad, 1833c, p. 40 (Harris reprint 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386; Conrad, 1865a, p. 8 [under *Cyclas*]; Conrad, 1866a, p. 6; Harris, 1895b, p. 16; Harris, 1919, p. 111, pl. 37, figs. 17-21; Brann and Kent, 1960, p. 506

*Astarte recurva* Lea, 1833, p. 61, pl. 2, fig. 34; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 386 under *L. dolabra*; Tuomey, 1858, pp. 264, 273; Harris, 1895b, p. 39 (= *L. dolabra* Conrad)

*Cyclas dolabra* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8 [L.]

*Lucina recurva* (Lea), de Gregorio, 1890, p. 202, pl. 27, figs. 36-40; fig. 41 copy Lea; Cossmann, 1893, p. 11

"Here" (or *Lucina*) *dolabra* Conrad, Chavan, 1937, p. 204

*Lucina (Recurvella) dolabra* Conrad, Chavan, 1937, p. 246

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes (6), No. 30523 ANSP Moore, 1962, p. 55

*Lucina fortidentalis* Harris

See *Saxolucina (Plastomiltha) fortidentalis* (Harris)

*Lucina (Plastomiltha) gaufia* Harris

See *Saxolucina (Plastomiltha) gaufia* (Harris)

*Lucina greggi* Harris in part

See *Saxolucina greggi* (Harris)

See also cf. *Saxolucina aquiana* (Clark)

*Lucina hamatus* (Dall)

See *Linga hamatus* (Dall)

*Lucina impressa* Lea

See *Linga (Cavilinga) pomilia* (Conrad)

*Lucina impressa* var. *postsulcata* de Gregorio

See *Linga (Cavilinga) pomilia* (Conrad)

*Lucina impressa* var. *subcuneata* de Gregorio

See *Linga (Cavilinga) pomilia alveata* (Conrad)

*Lucina impressa* var. *sublaevigata* de Gregorio

See *Linga (Cavilinga) pomilia* (Conrad)

*Lucina (Sphaerella) inflata* (Lea)

See *Diplodonta inflata* (Lea)

*Lucina (Sphaerella) inflata* (Lea) var. *paruminflata* de Gregorio

See *Diplodonta inflata* (Lea)

*Lucina lirata* Phillips

See under *Corbis lirata* (Conrad)

*Lucina lunata* Lea

*Linga (Cavilinga) pomilia alveata* (Conrad)

*Lucina lyrata* [sic] Phillips in D'Archiac, 1843

See under *Corbis lirata* (Conrad)

*Lucina (Pseudomiltha) megameris* Dall

See *Pseudomiltha megameris* Dall

*Lucina modesta* Conrad

See *Lucina (Callucina) papyracea* Lea

*Lucina ozarkana* Harris

See *Eophysema ozarkana* (Harris)

*Lucina (Eophysema) ozarkana* ? var. Harris

See *Eophysema ozarkana* (Harris) ? var.

*Lucina pandata* Conrad

See *Eomiltha pandata* (Conrad)



**Lucina (Callucina) papyracea** Lea**Lucinidae**

*Lucina papyracea* Lea, 1833, p. 58, pl. 1, fig. 31; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 387; Conrad, 1866a, p. 6; de Gregorio, 1890, p. 205, pl. 28, fig. 21 copy Lea; figs. 22-28; Cossmann, 1893, p. 12; Harris, 1895b, p. 32; Harris, 1919, p. 116, pl. 38, figs. 17-21; Brann and Kent, 1960, p. 510

*Lucina modesta* Conrad, 1846c, p. 403, pl. 4, fig. 13; H. C. Lea, 1849, p. 101; Conrad, 1866a, p. 6; d'Orbigny, 1850, p. 386; de Gregorio, 1890, p. 205, pl. 28, fig. 19 copy Conrad; Harris, 1895b, p. 28 (= *L. papyracea* Lea); not Dall, 1903a, p. 1364

*Cyclas modesta* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8

*Cyclas papyracea* (Lea), Conrad, 1865a, p. 8

*Lucina (Callucina) papyracea* Lea, Chavan, 1937, p. 253

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5164 ANSP see Harris 1919 p. 117. Type

*Lucina modesta* Conrad missing ANSP Moore, 1962, p. 78

*Lucina "parilis" [sic] sublaevigata* de Gregorio in Harris, 1919, p. 201 error for *pomilia*

See *Linga (Cavilinga) pomilia* (Conrad)

**Lucina perminuta** Casey**Lucinidae**

*Lucina perminuta* Casey, 1902a, p. 716

*Range*.—Upper Eocene. Jackson gr. (type) (or Vicksburg Oligocene)

*Locality*.—LA.: Grant Par., Young's Bluff, 5 mi. below Montgomery, Red R. (type)

*Types*.—Syntypes (2), No. 639012 USNM

*Lucina perovata* (Dall), Harris, 1951

See *Lucina* sp.

*Lucina pomilia* Conrad

See *Linga (Cavilinga) pomilia* (Conrad)

*Lucina pomilia* Conrad, Harris, 1897b

See *Linga (Cavilinga) pomilia smithi* (Meyer)

*Lucina pomilia alveata* Conrad

See *Linga (Cavilinga) pomilia alveata* (Conrad)

*Lucina pomilia smithi* Meyer

See *Linga (Cavilinga) pomilia smithi* (Meyer)

**"Lucina" primoidea** Aldrich**Lucinidae**

*Lucina primoidea* Aldrich, 1921, p. 19, pl. 2, figs. 23, 24

*Range*.—Paleocene. Porters Creek fm. (type), upper Midway gr.

*Locality*.—ALA.: Sumter Co., Black Bluff, Tombigbee R. (type)

*Type*.—Holotype, GSATC [disintegrated]

*Lucina recurva* (Lea)

See *Lucina (Recurvella) dolabra* Conrad

*Lucina rotunda* Lea

See *Epilucina rotunda* (Lea)

*Lucina rotunda* Lea, Aldrich, 1886

See *Epilucina* sp.

*Lucina smithi* Meyer

See *Linga (Cavilinga) pomilia smithi* (Meyer)

*Lucina smithi* Meyer, Shimer and Shrock, 1944; not Meyer, 1886b

See "*Lucina*" *whitei* Clark

*Lucina (Myrtea ?) subcurta* Harris

See *Myrtea ? subcurta* Harris

*Lucina subvexa* Conrad

See *Eophysema subvexa* (Conrad)

*Lucina subvexa* Conrad, Dall, 1903a

See *Eophysema ozarkana* (Harris),

See also *Eophysema subvexa* (Conrad)

*Lucina (Loripes) subvexa* Conrad, Harris, 1919

See "*Anodontia ?*" *augustana* Gardner

See also *Eophysema subvexa* (Conrad)

See also "*Lucina*" *sylvaerupis* Harris

*Lucina (Loripes) subvexa* Conrad variations Harris

See *Anodontia ? augustana* Gardner, 1951

The specimens figured by Harris, 1919, pl. 39, figs. 2, 4, (PRI Nos. 760, 762) have been compared with topotypes of *A. augustana* Gardner, and they prove to be the same species. The specimen (PRI 760) fig. 2 is one of several massed together and crushed in the same manner as the majority of the individuals of *A. augustana*. This identification establishes the formation of the Harris specimens as Tallahatta below the Tallahatta-Lisbon contact at Lisbon Bluff, Monroe Co., Ala., and not the so-called "Buhrstone", "St. Maurice", Lisbon fm. as indiscriminately originally indicated. Whether this species is related to *Loripes subvexa* Conrad, 1832, supposed to have come from Claiborne, cannot be determined. See notes under that species.

#### "*Lucina*" *sylvaerupis* Harris

#### Lucinidae

*Lucina (Loripes) subvexa* var. *sylvaerupis* Harris, 1919, p. 120, pl. 39, figs. 3, 5, 5a not *L. subvexa* Conrad

*Lucina (Loripes) subvexa* Conrad, Brann and Kent, 1960, p. 512 not hypotype. Equals holotype of *L. sylvaerupis* Harris

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm.; upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

Type.—Holotype, No. 761 PRI

*Lucina symmetrica* Conrad

See *Epilucina rotunda* (Lea)

*Lucina symmetrica* Harris, 1897b, not Conrad

See *Epilucina* sp.

#### *Lucina (Callucina) uhleri* Clark

#### Lucinidae

*Lucina uhleri* Clark, 1895, p. 5; Clark, 1896, p. 79, pl. 21, figs. 1a-d; Clark and Martin, 1901, p. 176, pl. 37, figs. 4, 7 copies type, figs. 5, 6; Harris, 1919, p. 117 footnote (not *L. ulrichi* Harris, 1897b)

*Lucina curta* Conrad, Shimer and Shrock, 1944, p. 423, pl. 168, figs. 26, 27 copy Clark and Martin, *L. uhleri*

*Range*.—Paleocene. Aquia fm. Lower Eocene, Nanjemoy fm. (type)

*Localities*.—MD.: Charles Co., Popes Cr.; Clifton Beach; Glymont; 1 mi. SE. of Mason Springs; Liverpool Point; Mattawoman Cr.; Prince Georges Co., Upper Marlboro; 1 mi. NE. of Piscataway. VA.: King George Co., Woodstock (type); 2 mi. below Potomac Cr.; Potomac Cr.

*Types*.—Syntypes, USNM

#### ***Lucina (Callucina) ulrichi* Harris**

#### **Lucinidae**

*Lucina ulrichi* Harris, 1897b, p. 71, pl. 14, figs. 5, 5a, 6 not *L. uhleri* Clark; Harris, 1919, p. 117 footnote; Brann and Kent, 1960, p. 513 syntypes not hypotypes as stated

*Range*.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type); Monroe Co., 4 mi. above Hamilton Bluff, Alabama R.

*Types*.—Syntypes lost, PRI

#### **"*Lucina*" whitei** Clark

#### **Lucinidae**

*Lucina whitei* Clark, 1895, p. 5; Clark, 1896, p. 79, pl. 20, figs. 3a-c; Clark and Martin, 1901, p. 176, pl. 37, figs. 8, 8a, 9 copies types

"*Lucina*" *whitei* Clark, Stewart, 1930, p. 187 cf. *Myrtea*

*Lucina smithi* Meyer, Shimer and Shrock, 1944, p. 423, pl. 168, fig. 24 copy Clark and Martin, 1901

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—MD.: Charles Co., W. of Port Tobacco; ½ mi. below Chapel Point. VA.: King George Co., Woodstock (type);

[?] Co., Hanoverville

*Types*.—Syntypes, USNM

#### ***Lucina* sp.**

#### **Lucinidae**

*Here* sp. Richards in Richards and Palmer, 1953, p. 49, pl. 10, fig. 8

*Range*.—Middle Eocene. Avon Park ls., upper Claiborne gr.

*Locality*.—FLA.: Levy Co., New Lebanon dolomite pit SW. ¼ NE. ¼ sec. 12, T. 16 S., R. 16 E

*Type*.—Figured specimen, No. I-7564 Fla. Geol. Sur.

#### ***Lucina* sp.**

#### **Lucinidae**

Not *Phacoides (Here) wacissanus* Dall, 1903a, p. 1365, pl. 50, fig. 15 Miocene

*Here* cf. *wacissana* Dall, Harris, 1951, p. 21, pl. 10, fig. 6; Brann and Kent, 1960, p. 452

*Here* cf. *wacissana* Dall, Richards in Richards and Palmer, 1953, p. 48, pl. 10, fig. 9

*Range*.—Upper Eocene. Inglis fm., lower Ocala gr., (Richards); "Ocala ls.", Ocala gr. (Harris).

*Localities*.—GA.: Dougherty Co., Flint R. near junction with Kinchefoonee Cr. near Albany (Harris). FLA.: Citrus Co., Dunnellon Phosphate Mining Co., SW. ¼ SE. ¼ sec. 14, T. 15 S., R. 16 E. (Richards)

*Types*.—Figured specimen, No. I-7563 Fla. Geol. Sur. (Richards); figured specimen, No. 24494 PRI (Harris)

**Lucina** sp.**Lucinidae***Lucina* ? sp., Barry 1942+, p. 64, pl. 7, fig. 12*Range*.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr.*Localities*.—LA.: *Sabine Par.*, rd. cut on W. side of La. Highway 180 about 2 ½ mi. NE. of Pleasant Hill; *De Soto Par.*, rd. cut along La. Highway 745 in SW. ¼ sec. 9, T. 10 N., R. 13 W.*Type*.—Figured specimen, No. 5015 LSU Pal. Mus.**Lucina** sp.**Lucinidae***Lucina* sp., Clark and Martin, 1901, p. 177*Range*.—Lower Eocene. Nanjemoy fm.*Locality*.—MD.: *Charles Co.*, Popes Cr.*Type*.—Unfigured specimen not found JHU, 1962**Lucina** sp.**Lucinidae***Lucina* sp. Kellum, 1926, p. 23, pl. 3, fig. 7*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.*Locality*.—N. C.: *New Hanover Co.*, Wilmington; *Pender Co.*, Old Rocky Point*Type*.—Figured specimen, No. 353259 USNM**Lucina** sp.**Lucinidae**

"Lucinoid" Richards in Richards and Palmer, 1953, p. 49, pl. 10, fig. 7

*Range*.—Upper Eocene. Inglis fm., lower Ocala gr.*Locality*.—FLA.: *Levy Co.*, Withlacoochee R., dam Florida Power Corp., SW. ¼ SW. ¼ sec. 8, T. 17 S., R. 17 E.*Type*.—Figured specimen, No. I-7587, Fla. Geol. Sur.**"Lucina"** sp.**Lucinidae***Lucina perovata* (Dall), Harris, 1951, p. 21, pl. 10, fig. 10; Brann and Kent, 1960, p. 510 probably not *Phacoides perovatus* Dall, 1916, p. 496, pl. 84, figs. 7, 8 Miocene*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.*Locality*.—GA.: *Houston Co.*, Georgia Lime Rock Corp., about 4 mi. from Perry*Type*.—Figured specimen, No. 24498 PRI*Lutetia parva* (Conrad)See *Alveinus minutus* Conrad**Lutetia texana** Harris**Kelliellidae***Lutetia texana* Harris, 1920, p. 7, pl. 17, figs. 7, 8; Gardner, 1945, p. 99 in part; Brann and Kent, 1960, p. 989*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.*Locality*.—TEXAS: *Nacogdoches Co.*, San Augustine rd., 5.5 mi. E. of Nacogdoches Hill on E. side of Tuscon Cr. (type)*Type*.—Lost. (Brann and Kent, 1960, p. 989)*Lutraria lapidosa* ConradSee *Pteropsella lapidosa* (Conrad)

*Lutraria papyria* Conrad  
See *Pteropsella papyria* (Conrad)

*Lutraria petrosa* Conrad  
See *Pteropsella lapidosa* (Conrad)

### **Macoma danai** Harris

### **Tellinidae**

*Macoma danai* Harris, 1919, p. 169, pl. 51, figs. 8, 9; Brann and Kent, 1960, p. 517

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 1234 PRI

### **Macoma scandula** (Conrad)

### **Tellinidae**

*Tellina scandula* Conrad, 1834, p. 132; Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 400, pl. 4, fig. 8; H. C. Lea, 1849, p. 106; d'Orbigny, 1850, p. 377; Conrad, 1865a, p. 4; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 225, pl. 35, fig. 31 copy Conrad; Cossmann, 1893, p. 9; Harris, 1895b, p. 40

*Macoma scandula* (Conrad), Dall, 1900, p. 1016; Harris, 1919, p. 166, pl. 50, figs. 17, 18 Conrad type

*Range*.—Middle Eocene. ? Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Probable holotype, No. 30585 ANSP, Moore, 1962, p. 95

### **Macoma sillimani** (Conrad)

### **Tellinidae**

*Tellina Sillimani* Conrad, App. in Morton, 1834, p. 7 listed only; Conrad, 1846c, p. 399, pl. 4, fig. 9; H. C. Lea, 1849, p. 106; d'Orbigny, 1850, p. 377; Conrad, 1865a, p. 5; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 224, pl. 35, fig. 35 copy Conrad; Cossmann, 1893, p. 9; Harris, 1895b, p. 41

*Tellina (Metis?) Sillimani* Conrad, Dall, 1900, p. 1016

*Macoma sillimani* (Conrad), Harris, 1919, p. 169, pl. 51, figs. 6, 7; Brann and Kent, 1960, p. 519

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 30581 ANSP, Moore, 1962, p. 96

*Macrocallista annexa* (Conrad)

See *Callista (Callista) annexa* (Conrad)

*Macrocallista cf. ovata* Rogers

See under *Pitar (Pitar) ovatus* (Rogers and Rogers)

### **Macrocallista subimpressa** (Conrad)

### **Veneridae**

*Cytherea subimpressa* Conrad, 1845b, p. 173; Conrad, 1848b, p. 130, pl. 14, fig. 26; H. C. Lea, 1849, p. 99; Clark, 1895, p. 5; Clark, 1896, p. 76, pl. 17, figs. 1a-h

*Meretrix subimpressa* (Conrad), Conrad, 1854, p. 30; Clark and Martin, 1901, p. 170, pl. 33, figs. 5, 5a, 6, 7, 8, 8a, 9, 9a; Harris, 1919, p. 136, pl. 43, figs. 2, 3; Brann and Kent, 1960, p. 547

*Dione subimpressa* (Conrad), Conrad, 1865a, p. 7; Conrad, 1866a, p. 28



*Callista* (*Callista*) *subimpressa* (Conrad), Palmer, 1927/1929, p. 80, pl. 13, figs. 2, 3, 8 section *Macrocallista*; Brann and Kent, 1960, p. 154

*Microcallista subimpressa* (Conrad), Stewart, 1930, p. 244

Not *Pitar* cf. *subimpressa* (Conrad), Harris, 1951, p. 22, pl. 11, figs. 6-8; not Brann and Kent, 1960, p. 694 = cf. "*Pitar*" sp.

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—VA.: *Hanover Co.*, Marlbourne (type); Newcastle, S. side of Pamunkey R.,  $\frac{3}{4}$ -1 mi. E. of bridge on U. S. route 360; [Co. ?], Hanoverville [? place unknown]; *King William Co.*, Piping Tree; *King George Co.*, Woodstock; *Prince George Co.*, Evergreen below City Point. MD.: *Charles Co.*, Popes Creek; *Prince Georges Co.*, 1 mi. SE. of Piscataway; Upper Marlboro, SW. of town near fork of 2 roads. Not ? GA.: *Houston Co.*, Clinchfield Quarry

*Types*.—Possible syntypes (3), No. 20195 ANSP, Moore, 1962, p. 98

### ***Macrocallista sylvaerupis* (Harris)**

**Veneridae**

*Cytherea perovata* ? Conrad, Aldrich, 1886, p. 53

*Meretrix subimpressa* Conrad var., Harris, 1897b, p. 63, pl. 12, figs. 6, 7 syntypes *M. sylvaerupis*; Brann and Kent, 1960, pp. 546, 547

*Meretrix sylvaerupis* Harris, 1919, p. 136, pl. 43, fig. 1; Brann and Kent, 1960, p. 547

*Callista* (*Callista*) *sylvaerupis* (Harris), Palmer, 1927/1929, p. 80, pl. 13, figs. 7, 9, 11 syntypes section *Macrocallista*; Brann and Kent, 1960, p. 155

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type)

*Types*.—Syntypes, No. 161, 162 [No. 1152 not considered syntype originally] PRI

### ***Macrocallista triangulata* Barry**

**Veneridae**

*Macrocallista triangulata* Barry, 1942+, p. 69, pl. 9, figs. 4-7

*Range*.—Lower Eocene. Sabinetown fm. (type), upper Wilcox [Sabine] gr.

*Locality*.—TEXAS: *Sabine Co.*, bluff  $\frac{1}{4}$  mi. down stream from Sabinetown Ferry Ldg., Sabine R. (type)

*Types*.—Syntypes, Nos. 5204, 5204A, LSU Pal. Mus.

### ***Macrocallista* ? sp.**

**Veneridae**

*Macrocallista* sp. Barry, 1942+, p. 69, pl. 9, fig. 11

*Range*.—Lower Eocene. Sabinetown fm., upper Wilcox [Sabine] gr.

*Locality*.—LA.: *Sabine Par.*, R. S. Hendrick's farm in center of S.  $\frac{1}{2}$  sec. 31, T. 7 N., R. 11 W.

*Type*.—Figured specimen, No. 5206 LSU Pal. Mus.

"*Mactra Alabamiensis* Lea", Conrad, App. in Morton, 1834, p. 8 is a *nomen nudum*. This was a mistake by Conrad. Lea did not give such a name.

*Mactra albirupina* Harris

See *Spisula albirupina* (Harris)

*Mactra decisa* Conrad  
See *Spisula decisa* (Conrad)

*Mactra dentata* Lea  
See *Pteropsella papyria* (Conrad)

*Mactra Grayi* Lea  
See *Mactropsis aequorea* (Conrad)

**Mactra inornata** Meyer

**Mactridae**

*Mactra inornata* Meyer, 1885a, pp. 461, 467; Harris in Harris and Palmer, 1946, p. 109

Species described but never figured.

Range.—Upper Eocene. Jackson gr. (type)

Locality.—MISS.: Hinds Co., Jackson (type)

Type.—Missing. Apparently never at JHU, *fide* USNM, 1962

*Mactra (Spisula) jacksonensis* Cooke  
See *Spisula jacksonensis* Cooke

*Mactra mississippiensis* Conrad var.  
See *Spisula mississippiensis* (Conrad) subsp.

*Mactra (Spisula) parilis* Conrad  
See *Spisula parilis* (Conrad)

*Mactra (Cyrena ?) parilis* Mut. *subaequilatera* de Gregorio  
See *Spisula parilis* (Conrad)

*Mactra parilis* Mut. *subcuneata* de Gregorio  
De Gregorio, 1890, p. 228, pl. 36, figs. 6-9; Harris, 1919, p. 201  
*parilia* [sic] error for *parilis*  
See *Spisula parilis* (Conrad)

*Mactra parilis* Mut. *subtruncata* de Gregorio  
De Gregorio, 1890, p. 227, pl. 36, figs. 6-9 same plate reference as *subcuneata*. De Gregorio evidently mixed the names.  
See *Spisula parilis* (Conrad). Explanation of pl. 36, figs. 6-9 gives *subtruncata*.

*Mactra praetenuis* Conrad  
See *Spisula praetenuis* (Conrad)  
See also cf. *Spisula praetenuis* (Conrad)  
See also *Spisula parilis bistriata* (Harris)

*Mactra praetenuis bistriata* Harris  
See *Spisula parilis bistriata* (Harris)

*Mactra pygmaea* Lea  
See *Spisula parilis* (Conrad)

**"Mactra" texana** Conrad

**Mactridae**

*Mactra texana* Conrad, 1857, p. 148, pl. 4, figs. 1a, 1b; Schuchert, *et al.*, 1905, p. 386

Range.—?Eocene

Locality.—TEXAS: Zapata, Starr, or Webb Co., prairie between Laredo and Rio Grande City

Types.—Syntypes No. 9855 USNM

*Mactrella praetenuis* (Conrad)  
See *Spisula praetenuis* (Conrad)

**Mactropsis aequorea** (Conrad)**Mactridae**

*Erycina aequorea* Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68, pl. 19, fig. 11); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; Harris 1895b, p. 2

*Mactra Grayii* Lea, 1833, p. 42, pl. 1, fig. 10; Conrad, App. in Morton, 1834, p. 8 = *Erycina aequorea* Conrad; H. C. Lea, 1849, p. 101; Harris, 1895b, p. 21

*Triquetra aequorea* (Conrad), Conrad, 1846b, p. 218, pl. 1, fig. 5 (not pl. 2 as in text)

*Mactropsis aequorea* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 5; Conrad 1866a, p. 7; de Gregorio, 1890, p. 229, pl. 36, figs. 13-17, 18 copy Conrad, fig. 19 copy Lea *M. Grayi*; Cossmann, 1893, p. 8; Dall, 1895a, p. 213; Dall, 1898b, pp. 896, 911; Harris, 1919, p. 177, pl. 54, figs. 7-9; Brann and Kent, 1960, p. 523

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Holotype, missing ANSP, Moore, 1962, p. 35. Syntypes *Mactra Grayii* Lea, Nos. 5026, 5027 ANSP

**Mactropsis olsoni** Van Winkle**Mactridae**

*Mactropsis Olsoni* Van Winkle, 1921, p. 8, pl. 1, figs. 4, 5; Brann and Kent, 1960, p. 524

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Locality*.—VA.: Hanover Co., Newcastle, S. side Pamunkey R.,  $\frac{3}{4}$ -1 mi. E. of bridge on U. S. 360 (type)

*Type*.—Holotype, No. 297 PRI

**Mactropsis rectilinearis** (Conrad)**Mactridae**

*Erycina rectilinearis* Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68, pl. 19, fig. 10); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 39

*Triquetra rectilinearis* (Conrad), Conrad, 1846b, p. 218, pl. 1, fig. 8 (not pl. 2 as in text)

*Mactropsis rectilinearis* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; de Gregorio, 1890, p. 229, pl. 36, fig. 20 copy Conrad; Cossmann, 1893, p. 8; Dall, 1898b, pp. 896, 911; Harris, 1919, p. 177, pl. 54, figs. 10-12; Brann and Kent, 1960, p. 524

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes (3), No. 20221 ANSP, Moore, 1962, p. 93

*Marcia* (*Mercimonia*) *mercenaroidea* (Aldrich)

See *Mercimonia* ? *mercenaroidea* (Aldrich)

*Marcia* (*Katelysia*) *retisculpta* (Meyer)

See *Textivenus retisculpta* (Meyer)

**Margaritaria inexpectans Vokes****Margaritariidae**

*Margaritaria inexpectans* Vokes, 1964, p. 140, pl. 1, fig. 4

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—LA.: *Grant Par.*, Creole Bluff, Red River, near Montgomery

*Type*.—Holotype, No. 644668 USNM

*Martesia dalli* [sic] Harris, Dall, 1898b, p. 820

See *Gastrochaena dalliana* (Harris)

*Martesia dalliana* Harris

See *Gastrochaena dalliana* (Harris)

**Martesia elongata Aldrich****Pholadidae**

*Martesia elongata* Aldrich, 1886, p. 37, pl. 4, figs. 10, 10a, 10b; de Gregorio, 1890, p. 237, pl. 38, figs. 18-20 copies Aldrich; Cossmann, 1893, p. 5; Harris, 1897b, p. 69, pl. 14, fig. 1 copy Aldrich; Dall, 1898b, p. 820

*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tusahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: *Wilcox Co.*, Yellow Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638793 USNM

**Martesia ? laredoensis Gardner****Pholadidae**

*Martesia ? laredoensis* Gardner, 1923, p. 114, pl. 32, fig. 10 (not given in text)

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—TEXAS: *Webb Co.*,  $\frac{1}{4}$  mi. S. of Espejo ranch, S. of Laredo (type)

*Type*.—Holotype, No. 352273 USNM

**Martesia recurva Aldrich****Pholadidae**

*Martesia recurva* Aldrich, 1921, p. 19, pl. 2, figs. 25, 26

*Range*.—Lower Eocene. Nanafalia fm. (type), lower Wilcox [Sabine] gr.

*Locality*.—ALA.: *Dale Co.*, Fleming's Mill on Pea R. near center sec. 7, T. 7 N., R. 23 E., near Beck Mill

*Type*.—Holotype, No. 60 GSATC

**Martesia texana Harris****Pholadidae**

*Martesia texana* Harris, 1895a, p. 53, pl. 3, fig. 6; Dall, 1898b, p. 820; Harris, 1919, p. 196, pl. 59, fig. 5 copy type

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

*Locality*.—TEXAS: *Cherokee Co.*, 2 mi. E. of Alto (type) (locality not located, see Stenzel, Krause, and Twining, 1957, p. 163)

*Type*.—Holotype, No. 35569 BEG

**Martesia sp.****Pholadidae**

*Martesia* sp. Gardner, 1935, p. 195

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: *Caldwell Co.*, 6 mi. N. of Lockhart (USGS Sta. 11682)

*Type*.—Unfigured specimen not found USNM, 1962

**Mauricia houstonia** (Harris)**Mytilidae**

*Modiola houstonia* Harris, 1895a, p. 46, pl. 1, fig. 1; Gimbrede, 1962, p. 1119

*Lithophaga* ? *houstonia* (Harris), Dall, 1898b, pp. 798, 801

*Modiolus* (*Mauricia*) *houstonius* (Harris), Harris, 1919, p. 32, pl. 17, figs. 5, 5a type; Gimbrede, 1962, p. 1118

*Modiolus houstonius* (Harris), Renick and Stenzel, 1931, p. 104

*Mauricia houstonia* (Harris), Stenzel, Krause, and Twining, 1957, p. 75, pl. 7, figs. 2-8

*Range*.—Middle Eocene. Stone City beds, middle Claiborne gr.; Hurricane lentil (type), Wheelock mem., Cook Mt. fm., upper Claiborne gr.; McBean fm. (Harris), upper Claiborne gr.

*Localities*.—TEXAS: *Houston Co.*, Hurricane Bayou, 3 mi. NE. of Crockett, [Bur. Econ. Geol. loc. No. 113-T-2] (type), see Stenzel, Krause, and Twining, 1957, p. 76; *Burleson Co.*, Stone City Bluff, Brazos R. LA.: *Lincoln Par.*, Chautauqua (Harris). S. C. *Orangeburg Co.*, 5 mi. NW. of Orangeburg (Harris)

*Type*.—Holotype, No. 145 BEG

**Mauricia leonia** Stenzel and Krause**Mytilidae**

*Mauricia leonia* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 77, pl. 7, fig. 1

*Range*.—Middle Eocene. Mount Tabor mem. (type), Cook Mt. fm., upper Claiborne gr.

*Locality*.—TEXAS: *Leon Co.*, Middleton—Sulphur Springs School county road (Bur. Ec. Geol. loc. no. 145-T-80) (type)

*Type*.—Holotype, No. 20637 BEG

**Meiocardia carolinae** Harris**Glossidae**

*Meiocardia carolinae* Harris in Van Winkle and Harris, 1919, p. 14, pl. 2, figs. 5, 6; Harris, 1919, p. 135, pl. 42, fig. 11; Kellum, 1926, p. 24; Brann and Kent, 1960, p. 539

*Meiocardia carolina* Harris, Richards, 1950, p. 18

*Range*.—Middle Eocene. Santee ls. (type), upper Claiborne gr. Upper Eocene. Castle Hayne ls., (type), Jackson gr. [syntypes from two localities, to be differentiated]

*Localities*.—S. C.: *Orangeburg Co.*, Eutaw Springs (type). N. C.: *New Hanover Co.*, Castle Hayne Quarry near Wilmington (type); *Craven Co.*, Neuse R., 17 miles above New Bern

*Types*.—Syntypes, No. 1405 PRI (one syntype, pl. 2, fig. 6 missing)

*Melina* sp.

See *Isognomen cornelliana* (Harris)

**Mercimonia** ? **mercenaroidea** (Aldrich)**Veneridae**

*Dosinia mercenaroidea* Aldrich, 1887, p. 82; Aldrich, 1897a, p. 6, pl. 1, figs. 10, 10a

Cf. *Meretrix mercenaroidea* (Aldrich), Dall, 1903a, p. 1234

*Clementia mercenaroidea* (Aldrich), Harris, 1919, p. 151, pl. 47, figs. 8-11; Brann and Kent, 1960, p. 233

*Marcia* (*Mercimonia*) *mercenaroidea* (Aldrich), Palmer, 1927/1929, p. 137, pl. 24, figs. 11, 15a, 16; Brann and Kent, 1960, p. 526



*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type). S. C.: Orangeburg Co., 3 mi. WNW. of Orangeburg (Harris)

*Types*.—Syntypes, Nos. 638856, 638857 USNM

*Meretrix aequorea* (Conrad)

See *Callista* (*Costacallista*) *aequorea* (Conrad)

*Meretrix aequorea trigoniata* (Lea)

See *Katherinella trigoniata* (Lea)

*Meretrix angelinae* Harris

See *Pitar angelinae* (Harris)

*Meretrix annexa* (Conrad)

See *Callista* (*Callista*) *annexa* (Conrad)

*Meretrix cornelli* Harris

See *Pitar* (*Pitar*) *cornelli* (Harris)

*Meretrix Dalli* Cossmann

See *Gratelupia* (*Cytheriopsis*) *hydana* (Conrad)

*Meretrix discoidalis* (Conrad)

See *Rhadopitaria discoidalis* (Conrad)

*Meretrix eversa* (Conrad)

See *Pitar eversus* (Conrad)

*Meretrix exigua* (Conrad)

See *Pitar* ? *exiguus* (Conrad)

*Meretrix hatchetigbeensis* (Aldrich)

See *Pelecypora hatchetigbeensis* (Aldrich)

*Meretrix lenis* (Conrad)

See *Pitar lenis* (Conrad)

*Meretrix lenticularis* (Rogers and Rogers)

See *Dosiniopsis lenticularis* (Rogers and Rogers)

*Meretrix liciata* (Conrad)

See *Pitar* (*Pitar*) *ovatus* (Rogers and Rogers)

*Meretrix macbeani* Harris

See *Pitar* (*Lamelliconcha*) *macbeani* (Harris)

*Meretrix mercenaroidea* (Aldrich)

See *Mercimonia* ? *mercenaroidea* (Aldrich)

*Meretrix minima* (Lea)

See *Katherinella trigoniata* (Lea)

*Meretrix mortoni* (Conrad)

See *Callista* (*Costacallista*) *mortoni* (Conrad)

*Meretrix mortoniopsis* Harris *nomen nudum*

See *Pitar* (*Pitar*) *nuttalliopsis greggi* (Harris)

*Meretrix neusensis* Harris

See *Callista* (*Callista*) *neusensis* (Harris)

*Meretrix nuttali* (Conrad)

See *Pitar (Pitar) nuttali* (Conrad)

*Meretrix nuttalliopsis* (Heilprin)

See *Pitar (Pitar) nuttalliopsis* (Heilprin)

*Meretrix nuttalliopsis* var. (Heilprin), Harris, 1897a, (as *mortoniopsis*), p. 477

See *Pitar (Pitar) nuttalliopsis greggi* (Harris)

*Meretrix nuttalliopsis fulva* Harris

See *Pitar (Pitar) nuttalliopsis fulvus* (Harris)

*Meretrix nuttalliopsis greggi* Harris

See *Pitar (Pitar) nuttalliopsis greggi* (Harris)

*Meretrix ovata* (Rogers and Rogers)

See *Pitar (Pitar) ovatus* (Rogers and Rogers)

*Meretrix ovata pyga* (Conrad)

See *Pitar (Pitar) pyga* (Conrad)

*Meretrix pearlensis* Harris

See *Callista (Costacallista) pearlensis* (Harris)

*Meretrix perovata* (Conrad)

See *Callista (Callista) perovata* (Conrad)

*Meretrix perovata aldrichi* Harris

See *Callista (Costacallista) aldrichi* (Harris)

*Meretrix perovata lisbonensis* Harris

See *Callista (Callista) perovata lisbonensis* (Harris)

*Meretrix perovata subvitrea* (de Gregorio)

See *Callista (Callista) perovata subvitrea* (de Gregorio)

*Meretrix poulsoni* (Conrad)

See *Pitar poulsoni* (Conrad)

*Meretrix profunda* Conrad

The name is a *nomen nudum*, Conrad in Wailes, 1854, p. 289, (reprint 1939, p. 19)

*Meretrix pyga* (Conrad)

See *Pitar (Pitar) pyga* (Conrad)

*Meretrix ripleyana* (Gabb)

See *Pitar ? ripleyanus* (Gabb)

*Meretrix subcrassus* (Lea)

See *Rhabdopitaria subcrassa* (Lea)

*Meretrix subimpressa* (Conrad)

See *Macrocallista subimpressa* (Conrad)

*Meretrix subimpressa* (Conrad) var. Harris, 1897b

See *Macrocallista sylvaerupis* (Harris)

*Meretrix sylvaerupis* Harris

See *Macrocallista sylvaerupis* (Harris)

*Meretrix texacola* Harris, Harris, 1895a, p. 50 in part, pl. 2, figs. 5, 5a, not 5 b

See *Pitar* (*Calpitaria*) *texacola* (Harris)

*Meretrix texacola* Harris, Harris, 1895a, p. 50 in part, pl. 2, fig. 5b, not figs. 5, 5a; Harris, 1919, p. 142, in part, pl. 45, figs. 2, 3 only

See *Pitar* (*Calpitaria*) *tornadonis* (Harris)

*Meretrix texacola* Harris, Harris, 1895a, p. 50 in part, not pl. 2, figs. 5, 5a, 5b

See *Pitar* (*Calpitaria*) *petropolitanus* Stenzel and Krause

*Meretrix texacola* Harris, Harris, 1919, p. 142 in part, pl. 44, figs. 12, 12a

See *Pitar* sp.

*Meretrix texacola*? Harris, Harris, 1919, p. 142 in part, pl. 44, fig. 15

See *Pitar* sp.

*Meretrix texacola* Harris, Renick and Stenzel, 1931, p. 104 in part, loc. 1 only

See *Pitar* (*Calpitaria*) *petropolitanus* Stenzel and Krause

*Meretrix texacola* Harris, Renick and Stenzel, 1931, p. 104 (in part; loc. 2, 3, and 4; not loc. 1)

See *Pitar* (*Calpitaria*) *tornadonis* (Harris)

*Meretrix texacola tornadonis* Harris, Harris, 1919, p. 142 in part, pl. 45, figs. 2, 3 only

See *Pitar* (*Calpitaria*) *tornadonis* (Harris)

*Meretrix trigoniata* (Lea)

See *Katherinella trigoniata* (Lea)

*Meretrix trigoniata bastropensis* Harris

See *Katherinella* ? *trigoniata bastropensis* (Harris)

See also *Katherinella* ? sp.

See also *Pitar* ("Agriopoma") *amichel* Gardner

*Meretrix trigoniata bastropensis* Harris, Renick and Stenzel, 1931, p. 104 in part loc. 1

See *Sinodia* (*Sinodia*) *eocaenica* Stenzel and Krause

*Meretrix trigoniata winnensis* Harris

See *Rhabdopitaria winnensis* (Harris)

*Meretrix?* *vespertina* (Conrad)

See *Pitar* ? *vespertinus* (Conrad)

*Meretrix Yoakumii* Gabb

See *Pitar* (*Lamelliconcha*) *yoakumi* (Gabb)

*Meretrix* spp.

See *Pitar* spp.

#### "*Meretrix*" sp.

#### Veneridae

*Meretrix* sp., Harris, 1896, p. 68

Range.—Paleocene. Midway gr.

Localities.—ALA.: Wilcox Co., "beds 18 and 19"; Barbour Co., R.R. cut 1  $\frac{1}{3}$  mi. NE. of Clayton. TEXAS: Limestone Co. (Harris)

Type.—Unfigured specimens. Lost

**Mesodesma singleyi** (Harris)**Mesodesmatidae**

*Ceronia singleyi* Harris, Dumble, 1894, p. 553 *nomen nudum*; Harris, 1895a, p. 52, pl. 3, figs. 3, 3a; Dall, 1898b, p. 912; Dumble, 1915b, p. 453

*Mesodesma singleyi* (Harris), Gardner, 1945, p. 114, pl. 7, fig. 6 Mexican

*Range*.—Upper Eocene. Jackson gr. (type). (Gardner, 1945, not middle Eocene as in Harris)

*Locality*.—TEXAS: *Lee Co.*, Sunnyside Church (type)

*Types*.—Syntypes, No. 35668 BEG (fig. 3); No. 35669 BEG (fig. 3a)

**Metis ? eutawensis** Harris**Veneridae**

*Metis ? eutawensis* Harris in Van Winkle and Harris, 1919, p. 14, pl. 2, fig. 3; Brann and Kent, 1960, p. 551

*Range*.—Middle Eocene. Santee ls (type), upper Claiborne gr. *vide* Cooke and MacNeil, 1952, p. 20

*Locality*.—S. C.: *Orangeburg Co.*, Eutaw Springs (type)

*Type*.—Holotype, No. 1403 PRI

*Microcallista subimpressa* (Conrad)

See *Macrocallista subimpressa* (Conrad)

*Micromeris minor* (Lea)

See *Crassinella minor* (Lea)

**Micromeris minutissima** (Lea)**Astartidae**

*Astarte minutissima* Lea, 1833, p. 64, pl. 2, fig. 39; H. C. Lea, 1849, p. 96; Harris, 1895b, p. 28

*Pteromeris minutissima* (Lea), Conrad, 1865a, p. 9

*Micromeris minutissima* (Lea), Conrad, 1866a, p. 5; Conrad, 1872a, pp. 51, 52; Tryon, 1884b, p. 229, pl. 120, fig. 25; Cossmann, 1893, p. 14; Harris, 1919, p. 95, pl. 32, figs. 24, 25; Brann and Kent, 1960, p. 555

*Astarte (Micromeris) minutissima* Lea, de Gregorio, 1890, p. 202, pl. 27, fig. 34 copy Lea

*Crassatellites (Micromeris) minutissimus* (Lea), Dall, 1903a, p. 1480

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5231 ANSP

*Micromeris parva* (Lea)

See *Cuna parva* (Lea)

*Micromeris senex* Meyer

See "*Venericardia*" sp.

**Microstagon nana** (Lea)**Ungulinidae**

*Egeria nana* Lea, 1833, p. 55, pl. 1, fig. 26; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 29

*?Egeria nana* Lea, Conrad, 1865a, p. 5; Conrad, 1866a, p. 7

*Diplodonta ungulina* (Conrad), de Gregorio, 1890, p. 208 in part, pl. 29, fig. 29 copy Lea

*Goodallia nana* (Lea), Cossmann, 1893, p. 14

*Diplodonta nana* (Lea), Dall, 1900, p. 1181 [in section *Felaniella*]; Harris, 1919, p. 128, pl. 40, figs. 15, 16; Brann and Kent, 1960, pp. 330, 331

*Diplodonta* (*Felaniella*) *nana* (Lea), Stenzel, Krause, and Twining, 1957, p. 118

*Microstagon nana* (Lea), Chavan, 1962, p. 8

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, probably No. 5142, ANSP

*Miltha* (*Plastomiltha*) *claibornensis* (Conrad)

See *Saxolucina* (*Plastomiltha*) *claibornensis* (Conrad)

*Miltha claytonia* (Harris)

See *Saxolucina claytonia* (Harris)

#### **Miltha ocalana** Dall

#### **Lucinidae**

*Phacoides* (*Miltha*) *ocalanus* Dall, 1903a, p. 1375, pl. 50, fig. 14; Schuchert, et al., 1905, p. 497; Dall, 1916, pp. 488, 497

*Miltha ocalana* Dall, Harris, 1951, p. 21, pl. 10, figs. 7-9; Brann and Kent, 1960, p. 556

*Range*.—Upper Eocene. "Ocala ls." (type), Ocala gr.

*Locality*.—FLA.: Marion Co., Ocala (type)

*Type*.—Holotype, No. 112513 USNM

*Miltha* (*Eomiltha*) *pandata* (Conrad)

See *Eomiltha pandata* (Conrad)

#### **Cf. Miodontiscus aldrichianus** (Harris)

#### **Carditidae**

*Astarte aldrichiana* Harris, 1896, p. 62, pl. 5, figs. 6, 6a; Brann and Kent, 1960, p. 92

*Range*.—Paleocene. Naheola fm. (type), upper Midway gr.

*Locality*.—ALA.: Wilcox Co., Dale's Branch, near Oak Hill (type)

*Type*.—Holotype, (lost) PRI

#### **Cf. Miodontiscus timothii** Palmer and Brann, new name

#### **Carditidae**

*Crassatellites clarkensis* Aldrich, 1911, p. 3, pl. 1, fig. 3. Preoccupied by Dall, 1900, pl. 36, figs. 20, 21, 24, 25; Dall, 1903a, p. 1470

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

*Type*.—Specimen, No. 639111 USNM "labeled as type is not certainly the figured specimen."

#### **Cf. Miodontiscus** sp.

#### **Carditidae**

*Crassatellites* (*Crassinella*) *aldrichianus* Harris sp., Aldrich, 1911, p. 3, pl. 1, figs. 1, 2

*Range*.—Lower Eocene. Bashi mem. Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.; Wilcox Co., about 6 mi. E. of Thomasville

*Type*.—Figured specimen, No. 639109 USNM



*Modiola alabamensis* AldrichSee *Brachidontes alabamensis* (Aldrich)*Modiola cretacea* ConradSee *Modiolus cretaceus* (Conrad)*Modiola Ducateli* Conrad, Tuomey, 1858, p. 266Not *M. Ducatelli* Conrad, 1840, p. 53—Miocene*Modiola houstonia* HarrisSee *Mauricia houstonia* (Harris)*Modiola (Lithodomus?) inflata* WhitfieldSee *Modiolus subinflatus* (Whitfield)*Modiola Johnsoni* WhitfieldSee *Modiolus johnsoni* (Whitfield)*Modiola ovata* GabbSee *Modiolus ovatus* (Gabb)*Modiola potomacensis* ClarkSee *Brachidontes potomacensis* (Clark)*Modiola saffordi* GabbSee cf. *Brachidontes saffordi* (Gabb)*Modiola stubbsi* HarrisSee *Brachidontes stubbsi* (Harris)*Modiola tenuis* MeyerSee *Crenella ? tenuis* (Meyer)*Modiola texana* "Gabb", HarrisSee *Brachidontes texanus* (Harris)See also *Brachidontes* sp.

## "Modiola texana (Gabb)" not Harris

See "*Perna*" *texana* Gabb*Modiola texana* HarrisSee *Brachidontes texanus* (Harris)**Modiolaria alabamensis** Meyer**Mytilidae**

*Modiolaria alabamensis* Meyer, 1886b, p. 83, pl. 3, fig. 19 *alabamiensis*; de Gregorio, 1890, p. 185, pl. 22, fig. 5 copy Meyer; Cossmann, 1893, p. 17 *alabamiensis*; Dall, 1898b, p. 806; Harris, 1919, p. 33, pl. 17, fig. 9 copy Meyer

*Range*.—Middle Eocene. "Lowest Claibornian" (type)

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638852 USNM

*Modiolus (Brachydontes) alabamensis* (Aldrich)See *Brachidontes alabamensis* (Aldrich)*Modiolus alabamensis* Clark and Martin, not AldrichSee *Brachidontes potomacensis* (Clark)

**Modiolus cawcawensis** Harris**Mytilidae**

*Modiolus cawcawensis* Harris, 1919, p. 31, pl. 17, figs. 3, 4; Brann and Kent, 1960, p. 564

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S. C.: *Orangeburg Co.*, Columbus Rd., 5 mi. N. of Orangeburg (type)

*Types*.—Syntypes, Nos. 477, 478 PRI

**Modiolus cretaceus** (Conrad)**Mytilidae**

*Modiola cretacea* Conrad, 1835b, p. 340, pl. 13, fig. 2; Aldrich, 1886, p. 43

*Perna cretacea* (Conrad), Conrad, 1865a, p. 10; Conrad, 1866a, p. 23; de Gregorio, 1890, p. 184

*Modiolus cretaceus* (Conrad), Dall, 1898b, p. 792 in part

*Volsella* (*Brachidontes* ?) *cretacea* (Conrad), Harris and Palmer, 1946, p. 44, pl. 10, figs. 10 copy Conrad, 11

*Range*.—Upper Eocene. Jackson gr. (zeuglodon horizon) (type)

*Localities*.—ALA.: *Clark[e] Co.* (type); "The Rocks;" *Choctaw Co.* (Aldrich), Fail P. O. (Dall)

*Type*.—Not found, Moore, 1962, p. 51

*Modiolus filiosus* (Conrad)

See *Arcoperna filiosa* Conrad

*Modiolus houstonius* Harris

See *Mauricia houstonia* (Harris)

**Modiolus johnsoni** (Whitfield)**Mytilidae**

*Modiola Johnsoni* Whitfield, 1885, p. 207, pl. 28, figs. 8, 9; Whitfield, 1899, p. 160; Weller, 1907, p. 509, pl. 55, figs. 14, 15 type

*Range*.—Lower Eocene. Manasquan fm. (type)

*Locality*.—N.J.: *Monmouth Co.*, Farmingdale (type)

*Type*.—Holotype, No. 9014/1AMNH

**Modiolus marylandicus** Clark and Martin**Mytilidae**

*Modiolus marylandica* Clark and Martin, 1901, p. 186, pl. 43, fig. 6

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Locality*.—VA.: *King George Co.*, Woodstock (type)

*Type*.—Holotype, USNM

**Modiolus ovatus** (Gabb)**Mytilidae**

*Modiola ovata* Gabb, 1860d, p. 396, pl. 68, fig. 31; Gabb, 1861, p. 199; Meek, 1864, p. 11; Whitfield, 1885, p. 197, pl. 26, figs. 13 type, 14;

Whitfield, 1899, p. 160; Weller, 1907, p. 508, pl. 55, figs. 16, 17

*Modiolus ovatus* (Gabb), Johnson, 1905, p. 12

*Range*.—Lower Eocene. Vincentown fm. (type)

*Locality*.—N. J.: boundary between *Gloucester* and *Camden Cos.*, Timber Creek (type)

*Type*.—ANSP (Johnson, 1905)

*Modiolus* (*Brachidontes*) *potomacensis* (Clark)

See *Brachidontes potomacensis* (Clark)

*Modiolus (Brachidontes) saffordi* (Gabb)  
See cf. *Brachidontes saffordi* (Gabb)

*Modiolus (Brachydontes) stubbsi* (Harris)  
See *Brachidontes stubbsi* (Harris)

**Modiolus subinflatus** (Whitfield)

**Mytilidae**

*Modiola (Lithodomus ?) inflata* Whitfield, 1885, p. 197, pl. 26, fig. 1, 2.  
Not *L. inflata* R., E. [E. Requier], 1848  
*Modiola subinflata* Whitfield, 1899, p. 160 new name *M. inflata*;  
Weller, 1907, p. 507, pl. 55, figs. 20, 21 type

*Range*.—Paleocene. Hornerstown fm. (type)

*Locality*.—N. J.: Gloucester Co., Mr. Ware's pit, near Mullica Hill (type)

*Type*.—Holotype, lost 1963

**Cf. Modiolus subpontis** (Harris)

**Mytilidae**

*Modiola subpontis* Harris, 1896, p. 49, pl. 3, figs. 6, 6a; Brann and Kent, 1960, p. 563

*Modiolus subpontis* (Harris), Dall, 1898b, p. 798

*Range*.—Paleocene. Uppermost Midway ls. as exposed at Ft. Gaines (type)

*Locality*.—GA.: Clay Co., Fort Gaines (type)

*Types*.—Syntypes, Nos. 55, 56 PRI

*Modiolus texanus* Gabb, Harris, 1919. Not Gabb, 1862c

See *Brachidontes texanus* (Harris)

See *Modiolus* sp.

*Modiolus texanus* Gabb, Trowbridge 1932, not Gabb, 1862c

See *Brachidontes* sp.

*Modiolus (Brachidontes) texanus* "Gabb" Dall, 1898b

See *Brachidontes texanus* (Harris)

See also "*Perna*" *texana* Gabb

**Modiolus** sp.

**Mytilidae**

*Volsella* sp. Richards in Richards and Palmer, 1953, p. 46, pl. 9, fig. 8

*Range*.—Upper Eocene. Inglis fm., lower Ocala gr.

*Locality*.—FLA.: Levy Co., L-93, road metal pit 2.9 mi. south of north limits of Gulf Hammock, just SW. of State Rd. 55 in SW. ¼ sec. 34, T. 14 S., R. 16 E.

*Type*.—Figured specimen, No. I-7560 Fla. Geol. Sur.

**Modiolus (Brachidontes) sp.**

**Mytilidae**

*Modiolus (Brachydontes) sp.*, Barry, 1942+, p. 57, pl. 11, fig. 1

*Range*.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr.

*Locality*.—LA.: Natchitoches Par., cultivated field N. of farmhouse in NE. ¼, NW. ¼, sec. 34, T. 10 N., R. 10 W. on La. Highway 404 and 429, about 4½ mi. S. of Ajax

*Type*.—Figured specimen, No. 5011 LSU Pal. Mus.

**Modiolus (Modiolus) sp.****Mytilidae**

*Modiolus (Modiolus) sp.* Barry, 1942+, p. 58, pl. 6, fig. 4

*Range*.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.

*Locality*.—LA.: *Sabine Par.*, S. bank La Nana Bayou about 100 yds. upstream from bridge on local road in center of sec. 12, T. 6 N., R. 13 W.

*Type*.—Figured specimen, No. 5121 LSU Pal. Mus.

**Modiolus (Modiolus) sp.****Mytilidae**

*Modiolus (Modiolus) sp.* Barry, 1942+, p. 58, pl. 5, fig. 3

*Range*.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.

*Locality*.—LA.: *Sabine Par.*, rd. cut along La. Highway 26, 2 ¼ mi. S. of Belmont on W. F. Skinner's farm. NW. ¼ sec. 16, T. 8 N., R. 11 W.

*Type*.—Figured specimen presumably LSU Pal. Mus.

**Modiolus sp.****Mytilidae**

*Modiolus texanus* "Gabb", Harris, 1902, p. 7 as *Modiola*; Harris, 1919, p. 33 in part, pl. 17, fig. 8 not Georgetown as on expl. of pl. see text; Brann and Kent, 1960, p. 565 not Georgetown

*Range*.—Middle Eocene. McBean fm., upper Claiborne gr.

*Localities*.—GA: *Columbia Co.*, west of Grovetown near 16th mile-post on R.R. from Augusta (Harris, 1902); cf. *Burke Co.*, 3.7 mi. S. of Hephzibah (Harris, 1919)

*Types*.—Figured specimens, No. 479 PRI; cf. No. 7724 USNM

**Montacuta bicuspidata Aldrich****Montacutidae**

*Montacuta bicuspidata* Aldrich, 1921, p. 20, pl. 2, figs. 29, 30

*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: *Monroe Co.*, Bells Ldg., Alabama R. (type)

*Type*.—Holotype, No. 26 GSATC

**Montacuta claiborniana Dall****Montacutidae**

*Montacuta claiborniana* Dall, 1899, p. 883 listed only; Dall, 1900, p. 1171, pl. 45, fig. 21; Schuchert, *et al.*, 1905, p. 416; Harris, 1919, p. 110, pl. 37, fig. 16 copy Dall

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 155768 USNM

**Montacuta dalli Cossmann**

See cf. *Mysella dalli* (Cossmann)

**Montacuta eximia Aldrich nomen nudum**

Museum label No. 76 GSATC, apparently description never published. (per. com. July 23, 1962)

**Montacuta herberti** Aldrich**Montacutidae**

*Montacuta Herberti* Aldrich, 1921, p. 21, pl. 3, figs. 6, 7

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Cave Branch (type)

*Type*.—Holotype, No. 27 GSATC

*Musculus alabamensis* (Aldrich)

See *Brachidontes alabamensis* (Aldrich)

*Myoparo costatus* Lea

See *Crenella margaritacea* (Conrad)

**Myrtea ? curta** (Conrad)**Lucinidae**

*Cyclas curta* Conrad, 1865a, p. 8 name only; Conrad, 1865b, p. 139;

Conrad, 1865d, p. 212, pl. 20, fig. 14; Stewart, 1930, p. 187 *Myrtea ?*

*Lucina curta* (Conrad), Conrad, 1866a, p. 24; not Shimer and Shrock, 1944, p. 423, pl. 168, figs. 26, 27 copy Clark and Martin, see *Lucina uhleri* Clark

*Myrtaea curta* (Conrad), Dall, 1903a, p. 1358 in part

*Lucina (Myrtea ?) curta* (Conrad), Harris and Palmer, 1946, p. 89, pl. 19, figs. 19-23; Brann and Kent, 1960, pp. 505, 506

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson; *Clarke Co.*, "Enterprise" = Garland Cr. (type) *vide* Aldrich, 1885c, p. 307. ARK.: *Cleveland Co.*, Vince Bluff, Saline R. TEXAS: *Sabine Co.*, Sabine R., Jackson beds (see Veatch, 1902, p. 131, pl. 33)

*Type*.—Probable holotype, No. 13223 ANSP, Moore, 1962, p. 51

**Myrtea ? subcurta** Harris**Lucinidae**

*Lucina (Myrtea ?) subcurta* Harris in Harris and Palmer, 1946, p. 89, pl. 20, figs. 1-5; Brann and Kent, 1960, p. 512

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type); *Clarke Co.*, Garland Cr.

*Types*.—Holotype, No. 4329; paratypes, Nos. 4330-4333 PRI

**Cf. Mysella dalli** (Cossmann)**Montacutidae**

*Montacuta dalli* Cossmann, 1893, p. 12, pl. 1, figs. 13, 14

*Bornia Dalli* (Cossmann), Dall, 1899, p. 883; Dall, 1900, p. 1149; Harris, 1919, p. 108, pl. 37, figs. 12, 12a copy Cossmann

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 11646 Lab. Géol., Sorbonne, Paris

**Mysella minuta** (Aldrich)**Montacutidae**

*Rocheftortia minuta* Aldrich, 1921, p. 20, pl. 2, figs. 27, 28

*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: *Monroe Co.*, Bells Ldg., Alabama R. (type)

*Type*.—Holotype, No. 25 GSATC



*Mysia astartaeformis* ConradSee *Diplodonta (Diplodonta) unguina* (Conrad)*Mysia deltoidea* ConradSee *Diplodonta (Diplodonta) unguina* (Conrad)*Mysia inflata* (Lea)See *Diplodonta (Diplodonta) inflata* (Lea)*Mysia levis* (Conrad)See *Diplodonta (Diplodonta) inflata* (Lea)*Mysia nitens* (Lea)See *Abra (Abra) nitens* (Lea)*Mysia unguina* (Conrad)See *Diplodonta (Diplodonta) unguina* (Conrad)*Mysia ? unguina* (Conrad) Heilprin, 1891aSee *Katherinella trigoniata bastropensis* (Harris)*Mytilus hamatoides* CallSee *Hormomya hamatoides* (Call)**Nanohalus cossmanni** (Dall)**Noetiidae***Limopsis perplana* Cossmann, 1893, p. 16, pl. 1, figs. 20, 21 not *Pectunculus perplanus* Conrad, 1834, p. 134=*Limopsis perplanus* (Conrad), 1865a, p. 12*Limopsis Cossmanni* Dall, 1898b, p. 605 new name for *L. perplana* Cossmann, 1893*Trinacria cossmanni* (Dall), Harris, 1919, p. 45, pl. 20, figs 1, 2; Brann and Kent, 1960, p. 875*Halonanus (Trinacriella) cossmanni* (Dall), MacNeil, 1937, p. 456, fig. 1g*Nanohalus cossmanni* (Dall), Stenzel, Krause, and Twining, 1957, pp. 71, 72, pl. 6, figs. 15, 16, 21, 22*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)*Type*.—Holotype, No. 11504 Lab. Géol., Sorbonne, Paris*Navicula aspera* ConradSee *Barbatia (Acar) aspera* (Conrad)*Navicula cuculoides* ConradSee *Barbatia cuculoides* (Conrad)*Navicula lima* ConradSee *Barbatia cuculoides* (Conrad)*Neaera aequivalvis* WhitfieldSee *Cuspidaria aequivalvis* (Whitfield)*Neaera alternata* AldrichSee *Cuspidaria attenuata* (Aldrich)*Neaera (Cardiomya) multiornata* Meyer and AldrichSee *Cuspidaria multiornata* (Meyer and Aldrich)*Neaera prima* AldrichSee *Cuspidaria prima* (Aldrich)

**Nemocardium actium** (Gardner)**Cardiidae**

*Protocardia* [*Nemocardium*] *actia* Gardner, 1935, p. 181, pl. 16, fig. 11  
*Nemocardium actia* (Gardner), Keen, 1950, p. 26 not lower Eocene;  
 Hughes, 1961, p. 389 not lower Eocene

*Range*.—Paleocene. Wills Point fm. (type), upper Midway gr.

*Locality*.—TEXAS: *Bastrop Co.*, Colorado R., 2 mi. below the  
 Travis-Bastrop Co. line (type)

*Type*.—Holotype, No. 370917 USNM

**Nemocardium curtum** (Conrad)**Cardiidae**

*Protocardia curta* Conrad, 1868, p. 731 *nomen nudum*; Conrad, 1869b,  
 p. 42, pl. 1, fig. 1; not Meek, 1868, p. 731 as in Whitfield, 1885, p.  
 236; not *Cardium curtum* Meek and Hayden, 1862, p. 442

*Protocardia curtum* Conrad, Whitfield, 1885, p. 236, pl. 30, figs. 5-7

*Nemocardium curtum* (Conrad), Keen, 1950, p. 27; Hughes, 1961, p.  
 389

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Localities*.—N. J.: *Monmouth Co.*, Shark R. (type); Squankum;  
 Farmingdale

*Type*.—Missing ANSP, Moore, 1962, p. 52

**Nemocardium gambrinum** (Gabb)Pl. 1, figs. 6, 10 **Cardiidae**

? *Protocardia diversa* Conrad, Gabb, 1862c, p. 370

*Protocardia gambrina* Gabb, 1862d, p. 371; Conrad, 1865a, p. 7; Con-  
 rad, 1866a, p. 6 not "Cal."; Harris, 1919, p. 133 in part, pl. 42, fig.  
 2, ? 3

*Nemocardium gambrina* (Gabb), Keen, 1950, p. 27 not Paleocene;  
 Hughes, 1961, p. 389 not Paleocene

*Protocardia gambrina harrisi* Dall, Brann and Kent, 1960, p. 738 in  
 part No. 1144 only

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R.;  
*Houston Co.* (type), Alabama Bluff, Trinity R.; K. Jones' well,  
 Hodge headright; Alum Bluff, Trinity R. LA.: *Bienville Par.*  
 Hammett's Branch. ALA.: *Monroe Co.*, Lisbon Bluff ?, Alabama  
 R.

*Type*.—Holotype, ANSP

**Nemocardium harrisi** (Dall)**Cardiidae**

*Cardium Nicoleti* Tuomey, 1858, pp. 264, 271 Bells Ldg.

*Protocardia Nicolleti* Conrad var. Aldrich, 1886, pp. 57, 59 *Cardium*  
*Nicolleti* var.

*Protocardia virginiana* ? Conrad, Harris, 1897a, p. 475, pl. 20, figs. 7,  
 8; not *P. virginiana* Conrad, 1864, p. 211

*Protocardia lenis* Conrad var. Harris, 1897b, p. 58, in part, pl. 12, fig. 1

*Protocardia harrisi* Dall, 1900, p. 1113=*P. virginiana* ? Harris, 1897a  
 not Conrad; Harris, 1919, p. 133 in part, pl. 42, fig. 6, not fig. 3;  
 Harris and Palmer, 1946, p. 93, pl. 20, fig. 22 (*Nemocardium*);  
 Brann and Kent, 1960, p. 738 also as *Protocardia gambrina harrisi*  
 Dall, not No. 1144 (=upper Claiborne)

*Range*.—Lower Eocene. Tusahoma fm., middle Wilcox [Sabine]  
 gr.; Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sa-  
 bine] gr.

*Localities*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type); *Monroe Co.*, Greggs Ldg., Alabama R.; Bells Ldg., Alabama R.; *Dale Co.*, Ozark  
*Type*.—Holotype, No. 6276 ANSP

**Nemocardium lene (Conrad)****Cardiidae**

*Cardium (Protocardia) lene* Conrad, 1856a, p. 258 (reprint 1939, p. 4)  
*Protocardia virginiana* Conrad, 1864, p. 211; Conrad, 1866a, p. 6;  
 Clark, 1895, p. 5; Clark, 1896, p. 81, pl. 26, figs. 1a-c; Harris, 1896,  
 p. 65. Not *P. virginiana* (Conrad), Harris, 1897a, p. 475, pl. 20, figs.  
 7, 8

*Protocardia lenis* (Conrad), Dall, 1900, p. 1113; Clark and Martin,  
 1901, p. 172, pl. 36, figs. 2, 2a, 3 not figs. 1, 1a

*Cardium line* [sic] Conrad, Shimer and Shrock, 1944, p. 425

*Nemocardium lene* (Conrad), Keen, 1950, p. 27; Hughes, 1961, p. 389.

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—MD.: *Charles Co.*, Popes Cr. VA.: [Hanover ?] Co.,  
 Pamunkey R. (type); *King George Co.*, Woodstock

*Type*.—Missing Moore, 1962, p. 69; type *Protocardia virginiana*  
 Conrad missing Moore, 1962, p. 108

**Nemocardium nicolletti (Conrad)****Cardiidae**

*Cardium Nicolletti* Conrad, 1841, p. 33; Conrad, 1842a, p. 190; Conrad,  
 1846a, p. 22, pl. 1, fig. 14; H. C. Lea, 1849, p. 97 as *Nicoletti*; Conrad  
 in Wailes, 1854, p. 289, pl. 14, fig. 6 (reprint 1939, p. 19, pl. 1, fig.  
 6); Conrad, 1856a, p. 258 in part (reprint, 1939, p. 4 in part); Tuo-  
 mey, 1858, p. 264, not p. 271 as *Nicoletti* (Bells Ldg., Ala.); Hilgard  
 in Hopkins, 1871, p. 11; Heilprin, 1884b, p. 87; Meyer, 1885a, p. 467;  
 Cossmann, 1893, p. 11 *Nemocardium* s.g.

*Protocardia Nicoleti* [sic] (Conrad), Conrad, 1865a, p. 7; Conrad,  
 1866a, p. 24

*Protocardia lima* Conrad, 1865a, p. 7 name only; Conrad, 1865b, p. 139,  
 pl. 10, fig. 3; Conrad, 1866a, p. 24

*Cardium (Protocardium [sic]) Nicolletti* Conrad, de Gregorio, 1890,  
 p. 216 in part

*Protocardia nicolletti* (Conrad), Gabb, 1862c, p. 370; Dall, 1900, p.  
 1113 as *Nicoletti*; Harris, 1897b, p. 59; Harris, 1919 (no page), pl.  
 42, fig. 4; Brann and Kent, 1960, p. 739

*Nemocardium nicolletti* (Conrad), Stewart, 1930, pp. 275, 276; Keen,  
 1950, p. 27 not middle Eocene; not Hughes, 1961, p. 389, pl. 54, figs.  
 1-10, text fig. new species

*Protocardia (Nemocardium) nicolletti* (Conrad), Harris and Palmer,  
 1946, p. 92, pl. 20, figs. 16-19; Brann and Kent, 1960, p. 739

Cf. *Cardium nicolletti* Conrad, Harris, 1951, p. 23, pl. 12, figs. 1, 2  
 as *Protocardia*; Brann and Kent, 1960, p. 739 as *Protocardia*.

The original description stated that the specimen came from the Ouachita R., La., area [Jackson Eocene], therefore, a type should be designated from that locality. The original specimen is lost, but the species occurs at Bunker Hill, Gibson Ldg., Danville Ldg. on the Ouachita R. A neotype should and can be designated from one of those localities preferably from the locality lowest in the section to meet the requirements of near "Monroe". The shell which Conrad figured and which has been labelled type in the ANSP was from Jackson, Miss. (Wailes, 1854). That specimen, No. 13190, a double-valved shell, has been indicated as "possible syntype". It cannot meet the requirements for neotype designation (see Int. Code Zool. Nomen., 1961, art. 75, p. 81). A neotype should be designated from the Ouachita R.

*Range*.—Upper Eocene. Moodys Branch fm. (type) lower Jackson gr.

*Localities*.—LA.: "Monroe Co.", "Washita R." Conrad, = Ouachita R. near Monroe ("type") Conrad, 1856a, p. 257; *Caldwell Par.*, Bunker Hill, Ouachita R.; above Gibson Ldg. Ouachita R.; *Catahoula Par.*, Danville Ldg., Ouachita R. MISS.: *Clarke Co.*, Garland Cr.; *Hinds Co.*, Jackson. Cf. Harris, 1951

*Type*.—Holotype, lost. Specimens, No. 13190 ANSP not syntypes as in Moore, 1962, p. 80

**Nemocardium quihi (Gardner)**

**Cardiidae**

*Protocardia quihi* Gardner, 1935, p. 180, pl. 16, figs. 9, 10

*Nemocardium quihi* (Gardner), Keen, 1950, p. 28 not "Lower Eocene"; Hughes, 1961, p. 389, not lower Eocene

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Medina Co.*, 5.7 mi. NW. of Castroville on the Quihi rd. (type);  $2\frac{1}{4}$  mi. N.  $20^{\circ}$  E. from Dunlay; bed of Hondo Cr., loose boulder  $\frac{1}{8}$  mi. below rd. crossing due E. of Elstone

*Type*.—Holotype, No. 370916 USNM

**Nemocardium salrivale (Harris)**

**Cardiidae**

*Protocardia salrivale* Harris, 1919, p. 134, pl. 42, figs. 7-9; Brann and Kent, 1960, p. 739

*Nemocardium salrivale* (Harris), Keen, 1950, p. 28; Hughes, 1961, p. 389

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—LA.: *Winn Par.*, St. Maurice at mouth of Saline Bayou (syntypes); possibly *Sabine Par.*, Bayou Negreet

*Types*.—Syntypes, No. 1148, 1149 [unnumbered lost] PRI

**Nemocardium, n. sp.**

**Cardiidae**

*Protocardia nicolletti* var. Harris, 1896, p. 65, pl. 6, fig. 2 not of Conrad, 1841; Brann and Kent, 1960, p. 739

*Nemocardium nicolletti* (Conrad), Hughes, 1961, p. 389, pl. 54, figs. 1-10 not of Conrad

*Range*.—Paleocene. Midway gr.

*Localities*.—ALA.: See Harris, 1896, p. 66 for Ala. localities. MISS.: See Hughes, 1961, pp. 389, 390

*Types*.—Figured specimens, No. 66 PRI; Nos. 563624, 129891 USNM

**Nemocardium sp.**

**Cardiidae**

*Cardium Nicolleti* Conrad var., Aldrich, 1886, p. 48

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.

*Type*.—Unfigured specimen unknown

**Nemocardium sp.**

**Cardiidae**

*Protocardia lenis* (Conrad), Clark and Martin, 1901, p. 172 in part, pl. 36, figs. 1, 1a not figs. 2, 2a, 3

*Range*.—Paleocene. Aquia fm.

*Localities*.—MD.: Charles Co., 1 mi. SE. of Mason Springs; Prince Georges Co., Upper Marlboro; 1 mi. NE. of Piscataway; Queen Annes Co., Rolphs Ldg., Chester R. VA.: Stafford Co., Aquia Cr.; Potomac Cr. King George Co., 2 mi. below Potomac Cr.; mouth of Paspotansa Cr.

*Type*.—Figured specimen USNM

### Nemocardium sp.

### Cardiidae

*Protocardia* sp. Gardner, 1935, p. 180

*Range*.—Paleocene. Wills Point fm. "red beds", upper Midway gr.

*Locality*.—TEXAS: southern Maverick Co.

*Type*.—Unfigured specimen not found USNM, 1962

### Nemocardium ? sp.

### Cardiidae

*Protocardia* ? sp. Gardner, 1935, p. 182

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: Caldwell Co., 5 ½ mi. N. of Lockhart

*Type*.—Unfigured specimen not found USNM, 1962

### Nemocardium sp.

### Cardiidae

*Protocardia* sp. Harris, 1919, no page, pl. 42, fig. 10; Brann and Kent, 1960, p. 739

*Range*.—Middle Eocene. Claiborne gr.

*Locality*.—VA.: Caroline Co., Port Royal, Rappahannock R.

*Type*.—Figured specimen, No. 1150 PRI

*Nodipecten anatis* (Morton)

See *Flexopecten anatis* (Morton)

*Nodipecten pulchricosta* (Meyer and Aldrich)

See *Chlamys pulchricosta* (Meyer and Aldrich)

*Noetia pulchra* Gabb

See *Pachecoia (Pachecoia) pulchra* (Gabb)

### Notocorbula texana (Gabb)

### Corbulidae

*Corbula texana* Gabb, 1860d, p. 387, pl. 67, fig. 54; Conrad, 1865a, p. 3; Conrad, 1866a, p. 8; not Heilprin, 1886, p. 57; not Heilprin, 1891a, p. 401; Kennedy, 1895, pp. 123, 128, not p. 113; Vaughan, 1896, p. 47 (questionable *fide* Stenzel, Krause, and Twining); Harris, 1919, p. 190, pl. 57, figs. 24-28; Deussen, 1924, p. 67; Renick and Stenzel, 1931, p. 103 in part, loc. 1, 2, and 3 only; Brann and Kent, 1960, p. 273

*Corbula (Aloides) texana* Gabb, Dall, 1898b, p. 845

"*Corbula*" *texana* Gabb, Vokes, 1944, p. 621 probably *Caestocorbula Corbula (Varicorbula) texana* Gabb, Gardner, 1945, p. 127; not pl. 9, figs. 1, 5

*Notocorbula texana* (Gabb), Stenzel, Krause, and Twining, 1957, p. 170, pl. 21, figs. 1-10

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Localities*.—TEXAS: Burtleson Co., Stone City Bluff, Brazos R. presumably (*fide* Stenzel, Krause, and Twining); Angelina Co., see Stenzel, Krause, and Twining

*Types*.—Figured syntype, lost *fide* Harris, 1919, p. 190; Stenzel, *et al.*, 1957, p. 172; unfigured syntypes, No. 13262 ANSP mixed



*Nucula aequalis* ConradSee *Calorhadia equalis* (Conrad)*Nucula austinclarki* MacNeilSee *Nucula (Lamellinucula) monroensis* Aldrich*Nucula bella* ConradSee *Calorhadia bella* (Conrad)*Nucula Brogniarti* [sic] Lea (*brongniarti*)See *Nuculana coelata* (Conrad)*Nucula caelata* ConradSee *Nuculana coelata* (Conrad)*Nucula calcarensis* ConradSee *Nuculana calcarensis* (Conrad)**"Nucula capsioipsis" de Gregorio****Nuculidae**

*Nucula capsioipsis* de Gregorio, 1890, p. 187, pl. 22, figs. 23, 24; Harris, 1919, p. 71, pl. 25, figs. 22, 23 copies De Gregorio; Schenck, 1934, p. 49

Localities and species not definite.

*Range*.—Middle Eocene. Gosport sd., uppermost Claiborne gr. (type, presumably)

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type, presumably)

*Type*.—Lost prior to 1962, De Gregorio Coll., Univ. of Palermo, Palermo, Sicily

*Nucula carinifera* LeaSee *Trinacria cuneus* (Conrad)*Nucula carolinensis* ConradSee *Nuculana carolinensis* (Conrad)***Nucula circe* Whitfield****Nuculidae**

*Nucula circe* Whitfield, 1885, p. 227, pl. 29, fig. 12; Whitfield, 1899, p. 161; Schenck, 1934, p. 49

Only specimen distorted.

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N. J.: *Monmouth Co.*, Shark R. (type)

*Type*.—AMNH (Whitfield, 1899, p. 161) lost AMNH *vide* Newell, 1962

*Nucula claibornensis* ConradSee *Orthoyoldia claibornensis* (Conrad)*Nucula coelata* ConradSee *Nuculana coelata* (Conrad)*Nucula cultelliformis* (Rogers and Rogers)See *Nuculana cultelliformis* (Rogers and Rogers)*Nucula eborea* Conrad, 1846=*Leda concentrica* Say, 1824See *Jupiteria smirna* (Dall) for details*Nucula equalis* ConradSee *Calorhadia equalis* (Conrad)

*Nucula improcera* ConradSee *Nuculana improcera* (Conrad)*Nucula magna* LeaSee *Nuculana magna* (Lea)***Nucula (Nucula) magnifica* Conrad****Nuculidae**

*Nucula magnifica* Conrad, 1833b, p. 37 not figured as indicated in Conrad (Harris reprint 1893, p. 59); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 102; Tuomey, 1858, pp. 266, 274; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; Aldrich, 1885c, p. 302; Aldrich, 1886, pp. 9, 44, 48; not Langdon, 1886, p. 205; Smith and Johnson, 1887, p. 29; de Gregorio, 1890, p. 186, pl. 22, figs. 16-18, fig. 19 copy *N. Sedgewickii* Lea; Cossmann, 1893, p. 14; not Harris, 1894b, p. 146; Harris, 1895b, p. 26; Harris, 1897b, p. 50 stated not in Wilcox Eocene; Harris, 1919, p. 73, pl. 26, figs. 1-3, 8; Schenck, 1934, p. 51; Harris and Palmer, 1946, p. 62 in part, pl. 14, fig. 17; Van de Poel, 1955, p. 9; Brann and Kent, 1960, p. 603

*Nucula Sedgewickii* Lea, 1833, p. 79, pl. 3, fig. 58; Conrad, App. in Morton, 1834, p. 7=*N. magnifica* Conrad; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 41; Schenck, 1934, p. 53 (= *sedgewickii*)

Not *Nucula magnifica* Aldrich, 1886, pp. 58-60; not Clark, 1895, p. 5; not Clark, 1896, p. 82=*N. potomacensis* Clark and Martin

*Nucula (Nucula) magnifica* Conrad, Stenzel, Krause, and Twining, 1957, p. 46

*Nuculana magnifica* (Conrad), Brann and Kent, 1960, p. 607 error for *Nucula*

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes (2), No. 30508 ANSP Moore, 1962, p. 73

***Nucula (Nucula) magnifica* Conrad "var."****Nuculidae**

*Nucula magnifica* Conrad var., Harris, 1919, p. 74, pl. 26, fig. 7; Brann and Kent, 1960, p. 603

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—LA.: Bienville Par., Hammetts Branch, SW.  $\frac{1}{4}$  sec. 30, T. 18 N., R. 6 W., about 2 mi. NE. Mt. Lebanon

*Type*.—Figured specimen, No. 623 PRI

***Nucula (Nucula) magnifica* Conrad "var."****Nuculidae**

*Nucula magnifica* Conrad "var.", Harris and Palmer, 1946, p. 62 in part, pl. 14, fig. 18

*Nuculana magnifica* (Conrad) "var.", Brann and Kent, 1960, p. 607 error for *Nucula*

*Range*.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R.

*Type*.—Figured specimen, No. 4244 PRI

***Nucula (Nucula) magnifica* Conrad "var."****Nuculidae**

*Nucula ovula* Dall in Call, 1891, p. 8 footnote not *N. ovula* Lea, 1833, p. 80

*Nucula magnifica* Conrad, Harris, 1894b, pp. 92, 115, 146

*Nucula magnifica* Conrad var., Harris and Palmer, 1946, p. 62 in part

*Range*.—Upper Eocene. White Bluff fm., lower Jackson gr.

*Localities*.—ARK.: Jefferson Co., White Bluff, Arkansas R.; Drew Co., Long Prairie; Wadsworth's well, 14 S., 6 W., sec. 5

*Type*.—Specimen unknown

*Nucula magnifica* Aldrich not Conrad, 1833b

See *Nucula* (*Nucula*) *mediavia* Harris

*Nucula magnifica* Clark, 1896 not Conrad, 1833b

See *Nucula* (*Nucula*) *potomacensis* Clark and Martin

*Nucula magnifica* Harris, 1894b not Conrad, 1833b

See *Nucula* (*Nucula*) *magnifica* Conrad "var."

*Nucula magnifica* var. *mauricensis* Harris

See *Nucula* (*Nucula*) *mauricensis* Harris

***Nucula* (*Nucula*) *magnifica yazooensis* Harris**

**Nuculidae**

*Nucula magnifica* var. *yazooensis* Harris, Harris and Palmer, 1946, p. 62, pl. 14, figs. 19, 20

*Nucula* (*Nucula*) *spheniopsis yazooensis* Harris, Stenzel, Krause, and Twining, 1957, p. 46 variant of *N. spheniopsis*

*Nuculana magnifica yazooensis* (Harris), Brann and Kent, 1960, pp. 607, 608 error for *Nucula*

*Range*.—Upper Eocene. Upper Jackson gr. (type)

*Locality*.—MISS.: Yazoo Co., Sims Siding, 8 mi. N. of Yazoo City (type)

*Types*.—Syntypes, Nos. 4245, 4246 PRI

***Nucula* (*Nucula*) *mauricensis* Harris**

**Nuculidae**

*Nucula magnifica mauricensis* Harris, 1919, p. 74, pl. 26, figs. 4-6; Price and Palmer, 1928, p. 24, pl. 7, figs. 6, 8; Renick and Stenzel, 1931, pp. 105, 108; Harris and Palmer, 1946, p. 62, pl. 14, fig. 21 same as Harris, 1919, pl. 26, fig. 5 designated by Harris as holotype but later than Gardner lectotype, 1945; Brann and Kent, 1960, pp. 603, 604

*Nucula mauricensis* Harris, Deussen, 1924, p. 67; Schenck, 1934, p. 51; Gardner, 1945, p. 41 lectotype designated

*Nucula* (*Nucula*) *mauricensis* Harris, Stenzel, Krause, and Twining, 1957, p. 43, pl. 4, figs. 1-4

*Range*.—Middle Eocene. Queen City fm., lower Claiborne gr.; Weches fm., middle Claiborne gr.; Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—TEXAS: Lee Co., Orell's Crossing, Elm Cr., (probably Bur. Ec. Geol. loc. No. 144-T-5); Bastrop Co., mouth of Gazley Cr., Colorado R., Smithville

*Types*.—Lectotype designated by Gardner, 1945, Bur. Ec. Geol., Univ. of Texas, not found by Stenzel, 1957. Paralectotypes, Nos. 620, 621 PRI

*Nucula media* Lea

See *Calorhadia equalis* (Conrad)

**Nucula (Nucula) mediavia Harris****Nuculidae**

*Nucula magnifica* Aldrich, 1886, p. 60 not Conrad, 1833b, p. 37

*Nucula mediavia* Harris, 1896, p. 53, pl. 4, fig. 4; Dall, 1898b, p. 577; Schenck, 1934, p. 51; Gardner, 1935, p. 116; Brann and Kent, 1960, p. 604

*Nucula* sp. aff. *N. mediavia* Harris, Gardner, 1945, p. 41 Mexico

*Nucula (Nucula) mediavia* Harris, Stenzel, Krause, and Twining, 1957, p. 45

*Range*.—Paleocene. Kincaid fm., lower Midway gr.; Clayton fm. (type), lower Midway gr.; Porters Cr. fm., upper Midway gr.

*Localities*.—ALA.: *Wilcox Co.*, Midway, "W. side of Alabama R., 5 mi. below Prairie Bluff" (type) *vide* Harris, 1896, p. 12. Station 4 on specimen; old locality, description see Harris, 1896, p. 12; *Sumter Co.*, Black Bluff, Tombigbee R; *Wilcox Co.*,  $\frac{1}{2}$  mi. W. of Graveyard Hill; 1 mi. N. of Allenton; Station No. 264 [USNM], *Prairie Cr. TEXAS: Bastrop Co.*, USGS Stations 11915 ? and 12112, Colorado R., 1  $\frac{1}{2}$  mi. below the Travis-Bastrop Co. line (Gardner)

*Type*.—Holotype, No. 34 PRI

*Nucula (Nucula) meridionalis* Meyer and Aldrich

See *Nucula (Nucula) spheniopsis* Conrad

**Nucula (Lamellinucula) monroensis Aldrich****Nuculidae**

*Nucula Monroensis* Aldrich, 1886, p. 40, pl. 4, fig. 2; de Gregorio, 1890, p. 187, pl. 22, fig. 25, fig. 26 copy Aldrich; Dall, 1898b, p. 577; Harris, 1919, p. 75, pl. 26, fig. 11 copy Aldrich; Schenck, 1934, p. 52

*Nuculana monroensis* (Aldrich), Cossmann, 1893, p. 14

*Nucula austinclarki* MacNeil, 1951, p. 13, figs. 1, 2

*Nucula (Lamellinucula) monroensis* Aldrich, Stenzel, Krause, and Twining, 1957, p. 45 with *N. austinclarki* MacNeil equivalent

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type); *Clarke Co.*, gully in W. center of sec. 10, T. 9 N., R. 4 E. (type of *N. austinclarki* MacNeil)

*Types*.—Syntypes, Nos. 638803, 638804 USNM. Holotype, *N. austinclarki* MacNeil, No. 560585 USNM

*Nucula mucronata* Conrad

See *Nuculana vanuxemi* (Dall)

See also *Calorhadia semen* (Lea)

*Nucula opulenta* Conrad

See *Calorhadia (Calorhadia) opulenta* (Conrad)

*Nucula ovula* Aldrich, 1886, p. 49 not Lea, 1833

See *Nucula* sp.

*Nucula ovula* Dall in Call, 1889, not Lea, 1833

See *Nucula magnifica* Conrad "var."

*Nucula ovula* Harris, 1896 and Harris, 1897b, not Lea, 1833

See *Nucula* spp.

**Nucula (Nucula) ovula Lea****Nuculidae**

*Nucula ovula* Lea, 1833, p. 80, pl. 3, fig. 59; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 102; not Aldrich, 1886, pp. 49, 53, 58; de Gregorio, 1890, p. 186, pl. 22, fig. 20 copy Lea; Cossmann, 1893, p. 14; Harris, 1895b, p. 31; Harris, 1896, p. 54 in part (not pl. 4, fig. 5—Midway); not Harris, 1897b, p. 50, pl. 8, fig. 7; Dall, 1898b, p. 577 in part; Clark and Martin, 1901, p. 202 in part, not pl. 57, fig. 6; Harris, 1919, p. 75, pl. 26, figs. 12-14; Schenck, 1934, p. 52; Shimer and Shrock, 1944, p. 375, pl. 145, fig. 36 copy Clark and Martin; Harris and Palmer, 1946, p. 63, pl. 14, figs. 23, 31; Van de Poel, 1955, p. 9; Brann and Kent, 1960, pp. 604, 605 not Nos. 36, 148  
*Nuculana ovula* (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3  
*Nucula* [sic] *ovula* Lea, Barry, 1942+, p. 44, pl. 2, figs. 6, 7  
*Nucula* (*Nucula*) *ovula* Lea, Stenzel, Krause, and Twining, 1957, p. 46

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne  
*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)  
*Type*.—Holotype, No. 5399 ANSP

*Nucula parilis* Conrad  
 See *Nuculana parilis* (Conrad)

*Nucula parva* Rogers and Rogers  
 See *Saccella parva* (Rogers and Rogers)

*Nucula pectuncularis* Lea  
 See *Pachecoa* ? (*Pachecoa* ?) *pectuncularis* (Lea)

*Nucula plana* Lea  
 See *Nuculana plana* (Lea)

*Nucula plicata* Lea  
 See *Calorhadia bella* (Conrad)

**Nucula (Nucula) potomacensis Clark and Martin****Nuculidae**

*Nucula magnifica* Clark, 1895, p. 5; Clark, 1896, p. 82; not *Nucula magnifica* Conrad, 1833b  
*Nucula potomacensis* Clark and Martin, 1901, p. 202, pl. 57, figs. 7, 7a, 8, 8a; Schenck, 1934, p. 53  
*Nucula* (*Nucula*) *potomacensis* Clark and Martin, Stenzel, Krause, and Twining, 1957, p. 46

*Range*.—Lower Eocene. Nanjemoy fm. (type)  
*Localities*.—VA.: King George Co., Woodstock (type); Hanover [?] Co., Hanoversville. MD.: Charles Co., head of Nanjemoy Cr.; Popes Cr.; E. and W. of Port Tobacco; 2½ mi. above Popes Cr.; Prince Georges Co., Charles Br. between Rosaryville and Upper Marlboro; Upper Marlboro (deep cut near Chesapeake Beach R.R. station)  
*Types*.—Syntypes, USNM

*Nucula pulcherrima* Lea  
 See *Calorhadia* (*Calorhadia*) *opulenta* (Conrad)  
 See also *Nuculana plana* (Lea)

**Nucula (Pectinucula ?) ripae Harris****Nuculidae**

*Nucula ripae* Harris, 1919, p. 74, pl. 26, figs. 9, 10; Schenck, 1934, p. 53; Brann and Kent, 1960, pp. 605, 606



*Nucula (Pectinucula ?) ripae* Harris, Stenzel, Krause, and Twining, 1957, p. 45

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; McBean fm., upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type). S.C.: *Orangeburg Co.*, 3 mi. WNW. of Orangeburg

*Types*.—Syntypes, Nos. 624, 625 PRI

***Nucula secunda* (Whitfield)**

**Nuculidae**

*Nucularia secunda* Whitfield, 1885, p. 229, pl. 29, figs. 13, 14; Whitfield, 1899, p. 161

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N.J.: *Monmouth Co.*, Shark R. (type)

*Type*.—Holotype, No. 7838, State Mus., Trenton, N.J.

*Nucula Sedgewickii* Lea

See *Nucula (Nucula) magnifica* Conrad

*Nucula semen* Lea

See *Calorhadia semen* (Lea)

***Nucula (Nucula) smithvillensis* Stenzel and Twining**

**Nuculidae**

*Nucula (Nucula) smithvillensis* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 44, pl. 4, figs. 5-7

*Range*.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type)

*Types*.—Holotype, No. 20763 BEG (figs. 6, 7); paratypes, No. 20764 BEG (fig. 5), No. 20765 BEG unfigured paratypes

***Nucula (Nucula) spheniopsis* Conrad**

**Nuculidae**

*Nucula spheniopsis* Conrad, 1865b, p. 140, pl. 10, fig. 13; Schenck, 1934, p. 54; Gardner, 1945, p. 42 in part; Harris and Palmer, 1946, p. 63, pl. 14, figs. 24-30 (29, 30 "vars."); Stenzel, Krause, and Twining, 1957, p. 46; Brann and Kent, 1960, p. 607

*Nucula meridionalis* Meyer and Aldrich in Meyer, 1887a, p. 10, pl. 2, fig. 2; Cossmann, 1893, p. 14; Schenck, 1934, p. 52; Harris and Palmer, 1946, pp. 63, 64 [under *spheniopsis*], pl. 14, fig. 28 copy Meyer and Aldrich; Stenzel, Krause, and Twining, 1957, p. 46

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Clarke Co.*, Enterprise=Garland Cr. (type) (Aldrich, 1885c, p. 307); *Hinds Co.*, Jackson

*Types*.—Missing ANSP Moore, 1962, p. 97. Holotype, *Nucula meridionalis* Meyer and Aldrich, No. 638881 USNM

*Nucula (Nucula) spheniopsis yazooensis* Harris

See *Nucula magnifica yazooensis* Harris

*Nucula subtrigona* Conrad

See *Nuculana subtrigona* (Conrad)

***Nucula* sp.**

**Nuculidae**

*Nucula ovula* Lea, Aldrich, 1886, p. 49. Not Lea, 1833, p. 80

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R.

*Type*.—Unfigured specimen, USNM

**Nucula sp.**

**Nuculidae**

*Nucula ovula* Harris, 1896, p. 54 in part, pl. 4, fig. 5. Brann and Kent, 1960, p. 604. Not *N. ovula* Lea, 1833, p. 80

*Range*.—Paleocene. Naheola fm., upper Midway gr.

*Localities*.—ALA.: Wilcox Co., Dale's Branch; Oak Hill

*Type*.—Figured specimen, No. 36 PRI

**Nucula sp.**

**Nuculidae**

*Nucula ovula* Harris, 1897b, p. 50, pl. 8, fig. 7; Brann and Kent, 1960, p. 604. Not *N. ovula* Lea, 1833, p. 80

Cf. *Nucula ovula* Lea "var." Aldrich, 1886, p. 53

*Range*.—Lower Eocene. Bashi mem., Hatchitigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.; Choctaw Corners

*Type*.—Figured specimen, No. 148 PRI

**Nucula sp.**

**Nuculidae**

*Nucula* sp. Gardner, 1923, p. 109, pl. 29, fig. 3

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Localities*.—TEXAS: Webb Co., 1 mi. E. of Laredo; 5 mi. SE. of Laredo

*Type*.—Figured specimen, No. 352266 USNM

**Nucula spp.**

**Nuculidae**

*Nucula* spp. Gardner, 1935, pp. 116, 117

*Range*.—Paleocene. Kincaid fm., lower Midway gr.; Wills Point fm., upper Midway gr.

*Localities*.—TEXAS: Freestone Co., Butler Dome; Cribbs Bluff, Brazos R.; Medina and Maverick Cos.; Brazos Co., Colorado R.

*Type*.—Unknown

**Nucula sp.**

**Nuculidae**

*Nucula* sp. Harris, 1919 [no p.] pl. 26, fig. 15 no description; Brann and Kent, 1960, p. 606

*Range*.—Middle Eocene. Claiborne gr.

*Locality*.—MISS.

*Type*.—Figured specimen No. 629 PRI

*Nuculana aequalis* (Conrad)

See *Calorhadia equalis* (Conrad)

**Nuculana albaria** (Conrad)

**Nuculanidae**

*Yoldia protexta* Conrad, 1865e, p. 213, pl. 21, fig. 2; Conrad, 1866a, p. 4; Conrad in Cook, 1868, p. 731 not "Meek, 1868, p. 731" as in Whitfield, 1885, p. 228. Not *Leda protexta* Gabb, 1860a, p. 303=*Nuculana protexta* (Gabb) Cretaceous.

*Yoldia albaria* Conrad, 1867a, p. 8 new name for *Yoldia protexta* Conrad, 1865e, p. 213

*Nuculana albaria* (Conrad), Whitfield, 1885, p. 228 in part, not pl. 29, figs. 15, 16

*Leda albaria* (Conrad), Dall, 1898b, p. 586

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Localities*.—N.J.: Monmouth Co., Shark R. (type); Farmingdale; Squankum

*Type*.—Missing Moore, 1962, p. 90 not Amer. Jour. Conch. vol. 1, p. 147, pl. 11, fig. 6 as in Moore. Error for *ibid.* p. 213, pl. 21, fig. 2 see above.

*Nuculana albirupina* (Harris)

See *Calorhadia* (*Litorhadia* ?) *albirupina* (Harris)

*Nuculana aldrichiana* var. *sabinetownensis* Barry

See *Calorhadia* (*Litorhadia*) *aldrichiana sabinetownensis* (Barry)

*Nuculana bella* (Conrad)

See *Calorhadia bella* (Conrad)

#### ***Nuculana* "bella" (Conrad) var."**

#### **Nuculanidae**

"*Leda bella* Conrad var." Conrad, 1860, p. 295

Species not known.

*Range*.—Paleocene. Midway gr.

*Locality*.—ALA.: Wilcox Co. "Showalter Collection" Matthews  
Ldg. *fide* Aldrich,

*Type*.—Unknown

*Nuculana Brongniarti* (Lea)

See *Nuculana coelata* (Conrad)

*Nuculana caelata* (Conrad)

See *Nuculana coelata* (Conrad)

#### ***Nuculana calcarensis* (Conrad)**

#### **Nuculanidae**

*Nucula calcarensis* Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 5; H. C. Lea, 1849, p. 102 *calcarensis*

*Leda calcarensis* (Conrad), Conrad, 1854, p. 29; Dall, 1898b, p. 578; Harris, 1919, p. 70, pl. 25, fig. 19 (type)

*Nuculana calcarensis* (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

*Type*.—Missing, ANSP Moore, 1962, p. 44

#### ***Nuculana carolinensis* (Conrad)**

#### **Nuculanidae**

*Nucula carolinensis* Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 3; H. C. Lea, 1849, p. 102

*Leda carolinensis* (Conrad), Conrad, 1854, p. 29; Dall, 1898b, p. 578; Harris, 1919, p. 70, pl. 25, fig. 17

*Nuculana carolinensis* (Conrad), Conrad, 1865a, p. 13

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.  
*Locality*.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)  
*Type*.—Missing, ANSP Moore, 1962, p. 46

*Nuculana claibornensis* (Conrad)  
 See *Orthoyoldia claibornensis* (Conrad)

**Nuculana cliftonensis** (Clark and Martin) **Nuculanidae**

*Leda cliftonensis* Clark and Martin, 1901, p. 201, pl. 56, fig. 11  
 Not *Nuculana* sp. ind. aff. *cliftonensis* (Clark and Martin), Rutsch, 1943, p. 148

*Range*.—Paleocene. Aquia fm. (type)  
*Localities*.—MD.: Charles Co., Clifton Beach; Liverpool Point.  
 VA.: Stafford Co., Aquia Cr.; Potomac Cr.; King George Co., 2 mi. below Potomac Cr. (type)  
*Type*.—Holotype, USNM

**Nuculana coelata** (Conrad) **Nuculanidae**

*Nucula coelata* Conrad, 1833a, p. 343; Conrad, App. in Morton, 1834, p. 7 (as *caelata*); H. C. Lea, 1849, p. 102; Harris, 1895b, p. 9 (*caelata*), p. 11 (*coelata*), not *Nucula caelata* Hinds, 1843, p. 99  
*Nucula Brogniarti* [sic] Lea, 1833, p. 82, pl. 3, fig. 61; Conrad, App. in Morton, 1834, p. 7 as *Brongniarti*=*N. caelata* Conrad; H. C. Lea, 1849, p. 102; Tuomey, 1858, p. 266; Harris, 1895b, p. 8; Schenck, 1934, p. 48 as *brongniarti*  
*Leda coelata* (Conrad), Conrad, 1854, p. 29; Dall, 1898b, p. 578; Van Winkle in Van Winkle and Harris, 1919, p. 6, pl. 1, fig. 6; Harris, 1919, p. 57, pl. 23, figs. 7-9; Brann and Kent, 1960, p. 474  
*Nuculana caelata* (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3  
*Leda Brongniarti* [sic] (Lea), de Gregorio, 1890, p. 187, pl. 22, figs. 27-29; fig. 30 copy Lea  
*Nuculana Brongniarti* (Lea), Cossmann, 1893, p. 15  
*Lembulus coelata* (Conrad), Dall, 1898b, p. 579

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.  
*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)  
*Types*.—Possible syntypes, Nos. 30575, 30576 ANSP Moore, 1962, p. 48. Possible syntypes, *N. Brongniarti*, Nos. 5409, 5410 ANSP

**Nuculana coelatella** (Van Winkle) **Nuculanidae**

*Leda coelatella* Van Winkle in Van Winkle and Harris, 1919, p. 6, pl. 1, figs. 4, 5; Van Winkle, 1921, p. 7 (not middle Eocene); Brann and Kent, 1960, p. 475

*Range*.—Lower Eocene. Nanjemoy fm. (type)  
*Locality*.—VA.: Hanover Co., Newcastle, S. side of Pamunkey R.,  $\frac{3}{4}$ -1 mi. E. of bridge on U.S. 360 (type)  
*Types*.—Syntypes, Nos. 1393, 1394 PRI

**Nuculana (Hilgardia) coelatooides** (Harris) **Nuculanidae**

*Leda coelatooides* Harris, 1919, p. 58, pl. 23, fig. 10; Brann and Kent, 1960, p. 475  
*Nuculana (Hilgardia) multilincata coelatooides* (Harris), Harris and Palmer, 1946, p. 59, pl. 14, fig. 7; Brann and Kent, 1960, p. 608

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: Clarke Co., Wautubbee (type)

*Type*.—Holotype, No. 580 (4237) PRI

*Nuculana compsa* (Gabb)

See *Calorhadia* (*Calorhadia*) *compsa* (Gabb)

***Nuculana corpulentoides* (Aldrich)**

**Nuculanidae**

*Yoldia corpulentoides* Aldrich, 1895b, p. 18, pl. 5, figs. 9, 9a

*Leda corpulentoides* (Aldrich), Dall, 1898b, pp. 578, 594

Cf. *Nuculana corpulentoidea* [sic] (Aldrich), Barry, 1942+, p. 46, pl. 2, figs. 8, 9

*Nuculana corpulentoidea* [sic] (Aldrich), Wasem and Wilbert, 1943, pp. 188, 192, pl. 31, fig. 6

*Range*.—Lower Eocene. Tuscahoma fm. (type) middle Wilcox [Sabine] gr.; ? Pendleton Ferry fm., middle Wilcox [Sabine] gr.

*Localities*.—ALA.: Choctaw Co., Tuscahoma Ldg., Tombigbee R. (type). TEXAS: for possible localities in Sabine Co. see Barry, 1942+, p. 46

*Types*.—Syntypes, No. 638965 USNM fig. 9 a double valved specimen now shattered, 1962. No. 638966 USNM herein designated lectotype. Better specimen than No. 638965

***Nuculana corpulentoides* (Aldrich) "var."**

**Nuculanidae**

*Leda corpulentoides* (Aldrich) "var." Harris, 1897b, p. 51, pl. 8, figs. 10, 11; Harris, 1899b, p. 301; Brann and Kent, 1960, p. 475

*Range*.—Lower Eocene. Nanafalia fm., lower Wilcox [Sabine] gr.; Pendleton Ferry fm., middle Wilcox [Sabine] gr.; Tuscahoma fm., middle Wilcox [Sabine] gr.

*Localities*.—TEXAS: Sabine Co., Pendleton, Sabine R. ALA.: Marengo Co., Nanafalia Ldg., Tombigbee R.; Monroe Co., Greggs Ldg., Alabama R.

*Types*.—Figured specimens, Nos. 151, 152 PRI

***Nuculana crassiparva* (Harris)**

**Nuculanidae**

*Leda crassiparva* Harris, 1919, p. 68, pl. 25, figs. 7-9 [fig. 9 in PRI not Aldrich Coll. as in text and on expl. of pl.]; Brann and Kent, 1960, p. 475

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type)

*Types*.—Holotype, No. 604; paratype, No. 605 PRI [pl. 25, fig. 9 not in Aldrich Coll. as in Harris, 1919, p. 68]

***Nuculana cultelliformis* (Rogers and Rogers)**

**Nuculanidae**

*Nucula cultelliformis* Rogers and Rogers, 1837, p. 339 (reprint 1884, p. 667); H. C. Lea, 1849, p. 102; Schenck, 1934, p. 49

*Leda cultelliformis* (Rogers and Rogers), Conrad, 1854, p. 29; Dall, 1898b, p. 578 [not middle Eocene]; Clark and Martin, 1901, p. 198, pl. 56, figs. 8, 8a

*Nuculana cultelliformis* (Rogers and Rogers), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

*Yoldia cultelliformis* (Rogers and Rogers), Clark, 1895, p. 5



*Leda* (*Adrana*) *cultelliformis* (Rogers and Rogers), Clark, 1896, p. 83, pl. 28, figs. 3a, 3b

*Leda cultelliformis* (Rogers and Rogers), Van Winkle and Harris, 1919, p. 10; Van Winkle, 1921, p. 7 [not middle Eocene]

*Range*.—Paleocene. Aquia fm. Lower Eocene. Nanjemoy fm. (type)

*Localities*.—VA.: *Hanover Co.*, Newcastle; *King George Co.*, Woodstock; *Prince George Co.*, Evergreen; Coggins Point (type). MD.: *Charles Co.*, Clifton Beach; Popes Cr.; 2 ½ mi. above Popes Cr.; *Prince Georges Co.*, Upper Marlboro (deep cut near Chesapeake Beach R.R. station)

*Type*.—Probably MCZ

#### **Nuculana eoa** (Gardner)

#### **Nuculanidae**

*Leda eoa* Gardner, 1935, p. 118, pl. 6, figs. 1, 2

"*Leda*" *eo*a Gardner, Rutsch, 1943, p. 148

*Range*.—Paleocene. Littig mem. (type), Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: *Travis Co.*, USGS Sta. 2439, 1 mi. E. of Webberville (type)

*Type*.—Holotype, No. 138604 USNM

#### **Nuculana fiski** Barry

#### **Nuculanidae**

*Nuculana fiski* Barry, 1942+, p. 45, pl. 2, fig. 5

*Range*.—Paleocene. "Logansport" (name preoccupied) fm. (type), middle Midway gr. Lower Eocene. Nanafalia fm., lower Wilcox [Sabine] gr.

*Localities*.—LA.: *Natchitoches Par.*, Rocks Cr. (type). ALA.: *Marengo Co.*, Nanafalia Ldg., Tombigbee R.

*Types*.—Holotype, No. 5002; paratype, No. 5003, LSU. Pal. Mus.

*Nuculana hammetti* (Harris)

See *Calorhadia* (*Calorhadia*) *hammetti* (Harris)

#### **Nuculana hannahae** Palmer and Brann, new name

#### **Nuculanidae**

*Leda milamensis* Harris, 1896, p. 54, pl. 4, fig. 8; Brann and Kent, 1960, p. 477

*Leda* (*Saccella*) *milamensis* Harris, Gardner, 1935, p. 121 in part

Not *Leda milamensis* Harris, 1895a, p. 47, pl. 1, fig. 4

*Leda milamensis* Harris, 1896, from the Paleocene Midway of Tennessee is not the same species as *L. milamensis* Harris, 1895a from the lower Eocene. Gardner, 1935, p. 121 pointed out a critical difference between the shells as well as horizon of the two forms. We are therefore, renaming *Leda milamensis* Harris, 1896, p. 54 not Harris, 1895a, p. 47

*Range*.—Paleocene. Midway gr. (type)

*Localities*.—TENN.: *Hardeman Co.*, Hannah's bed f. 1¾ mi. N. of Crainesville (type); Huddleston's about same distance W. of Crainesville (Harris)

*Type*.—Holotype, No. 39 PRI

#### **Nuculana improcera** (Conrad)

#### **Nuculanidae**

*Nucula improcera* Conrad, 1848b, p. 131, pl. 14, fig. 23; Schenck, 1934, p. 51

*Nuculana improcera* (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

*Leda improcera* (Conrad), Clark, 1895, p. 5; Clark, 1896, p. 83 in part, pl. 28, figs. 1a-d (not  $\equiv$  *N. parilis* Conrad var.); Dall, 1898b, p. 578 [not middle Eocene]; Clark and Martin, 1901, p. 199, pl. 56, figs. 1-4; Van Winkle in Van Winkle and Harris, 1919, p. 10 [not middle Eocene]

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—MD.: Charles Co., Popes Cr., head of Nanjemoy Cr., 2 ½ mi. above Popes Cr. VA.: King George Co., Woodstock; Prince George Co., Evergreen; Hanover Co., Marlbourne (type) [in text]; Caroline Co., Port Royal; [Co. unknown] Marshfield

*Type*.—Probable holotype, "labelled 'Pamunkey R., Va.' but [Marlbourne] 'Hanover Co., Va.' in text" No. 30673 ANSP Moore, 1962, p. 66

***Nuculana jewetti* (Gardner)**

**Nuculanidae**

*Leda jewetti* Gardner, 1927, p. 363, fig. 6

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—TEXAS: Leon Co., 8 mi. S. of Jewett (type)

*Type*.—Holotype, No. 369243 USNM

***Nuculana kittensis* (Harris)**

**Nuculanidae**

*Leda kittensis* Harris, 1919, p. 67, pl. 25, fig. 6

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: Calhoun Co., Kitts Ravine, 4½ mi. NW of Creston [Keitts; Cooke, 1936, p. 68] (type)

*Type*.—Holotype, missing USNM 1962

***Nuculana linifera* Conrad**

**Nuculanidae**

*Nuculana linifera* Conrad, 1865b, p. 139, pl. 10, fig. 8

*Leda linifera* (Conrad), Dall, 1898b, pp. 578, 591, Jackson Eocene only

*Nuculana linifera* ? Conrad, Harris and Palmer, 1946, p. 60, pl. 14, fig. 8; Brann and Kent, 1960, p. 607

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Localities*.—MISS.: Clarke Co., "Enterprise" (=Garland Cr.) see Aldrich, 1885c, p. 307; Shubuta

*Type*.—Holotype, No. 13229 ANSP Moore, 1962, p. 71

***Nuculana magna* (Lea)**

**Nuculanidae**

*Nucula magna* Lea, 1833, p. 197, pl. 6, fig. 211; H. C. Lea, 1849, p. 102;

Harris, 1895b, p. 26; Schenck, 1934, p. 51

*Nuculana magna* (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3;

Cossmann, 1893, p. 15, pl. 1, fig. 19

*Leda magna* (Lea), de Gregorio, 1890, p. 186, pl. 22, fig. 38 copy Lea;

Dall, 1898b, p. 578; Harris, 1919, p. 62, pl. 24, figs. 3, 4

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5996 ANSP

***Nuculana magna lisbonensis* (Aldrich)**

**Nuculanidae**

*Leda lisbonensis* Aldrich, 1895b, p. 17, pl. 5, fig. 4

*Leda magna* var. *lisbonensis* Aldrich, Harris, 1919, p. 63, pl. 24, figs. 5-7; Brann and Kent, 1960, p. 476

*Leda* (*Adrana* ?) *lisbonensis* Aldrich, Dall, 1898b, p. 578

*Calorhadia* (*Litorhadia*) sp. cf. *C. (L.) lisbonensis* (Aldrich), Gardner, 1945, p. 48 in part

Not *Nuculana lisbonensis* Aldrich, Sutton, 1946, p. 1671

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—TEXAS: *San Augustine Co.*, San Augustine "St. Augustine" [sic] Harris, 1919. LA.: *Winn Par.*, St. Maurice rd., 1 mi. SW. of Winnfield Marble Quarry; *Sabine Par.*, 3 mi. S. Negreet P.O.; near mouth Negreet Bayou. ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R. (type); Hamilton Bluff, Alabama R. GA.: *Clay Co.*, ? Fort Gaines. N.C.: *Craven Co.*, Neuse R., 16-17 mi. and 27 mi. above New Bern

*Type*.—Holotype, No. 638963 USNM

### ***Nuculana magnopsis* (Harris)**

### **Nuculanidae**

*Leda magnopsis* Harris, 1919, p. 64, pl. 24, fig. 8; Brann and Kent, 1960, p. 476

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: *Orangeburg Co.* "Rock [Rocky] Swamp", SE. of Springfield (type)

*Type*.—Holotype, No. 593 PRI

*Nuculana magnifica* (Conrad)

See *Nucula magnifica* Conrad

*Nuculana magnifica yazooensis* (Harris)

See *Nucula magnifica yazooensis* Harris

### ***Nuculana marieana* (Aldrich)**

### **Nuculanidae**

*Leda marieana* Aldrich, 1897a, p. 16, pl. 5, fig. 5; Harris, 1897b, p. 5, pl. 8, fig. 12 copy Aldrich

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Choctaw Corner (type)

*Type*.—Holotype, No. 639002 USNM

*Nuculana mater* (Meyer)

See *Calorhadia* (*Calorhadia* ?) *mater* (Meyer)

*Nuculana media* (Lea)

See *Calorhadia equalis* (Conrad)

### ***Nuculana milamensis* (Harris)**

### **Nuculanidae**

*Leda milamensis* Harris, 1895a, p. 47, pl. 1, fig. 4; Dall, 1898b, p. 578.

Not *Leda milamensis* Harris, Harris, 1896, p. 54 in part, pl. 4, fig. 8; not Brann and Kent, 1960, p. 477=*N. hannahae* Palmer and Brann, new name herein

*Leda* (*Saccella*) *milamensis* Harris, Gardner, 1935, p. 121 in part

*Range*.—Lower Eocene. Lower Wilcox [Sabine] gr. (type)

*Locality*.—TEXAS: *Milam Co.*, Smileys Bluff, 2 mi. above mouth of Pond Cr., Brazos R. (type) (Gardner, 1935, p. 54)

*Type*.—Holotype, No. 35671 BEG

*Nuculana monroensis* (Aldrich)See *Nucula* (*Lamellinucula*) *monroensis* Aldrich*Nuculana mucronata* (Conrad)See *Calorhadia semen* (Lea)See also *Nuculana vanuxemi* (Dall)***Nuculana* (*Hilgardia*) *multilineata* (Conrad)****Nuculanidae**

*Leda multilineata* Conrad in Wailes, 1854, p. 289, pl. 14, fig. 4 (reprint, 1939, p. 19, pl. 1, fig. 4); Conrad, 1856a, p. 258 (reprint, 1939, p. 4); Hilgard in Hopkins, 1871, p. 11; Harris, 1894b, p. 148; Dall, 1898b, pp. 578, 588 in part, not pl. 25, figs. 11, 11b Oligocene; Harris, 1919, p. 58, pl. 23, figs. 11, 12; Brann and Kent, 1960, p. 477

*Nuculana* (*Hilgardia*) *multilineata* (Conrad), Harris and Palmer, 1946, p. 59, pl. 14, figs. 2-6; Brann and Kent, 1960, p. 608

"*Leda*" *multilineata* Conrad, Gardner, 1939, p. 341

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr. Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Clarke Co.*, "near Enterprise", Garland Cr. *vide* Aldrich, 1885c, p. 307; *Hinds Co.*, Jackson (type). LA.: *Grant Par.*, Montgomery, Red R.; *Caldwell Par.*, "at various localities on the Ouachita River." ARK.: *Cleveland Co.*, Vince Bluff, Saline R.; Cross Roads Church, 5 mi. NW. of Kingsland

*Type*.—"Donated to ANSP by Wailes, 1855" *vide* Harris, 1919, p. 59. Missing ANSP Moore, 1962, p. 79

*Nuculana opulenta* (Conrad)See *Calorhadia* (*Calorhadia*) *opulenta* (Conrad)*Nuculana opulenta*-like Harris and PalmerSee *Calorhadia cf. opulenta* (Conrad)*Nuculana ovula* (Lea)See *Nucula* (*Nucula*) *ovula* Lea***Nuculana ozarkola* (Harris)****Nuculanidae**

*Leda ozarkola* Harris, 1919, p. 68, pl. 25, figs. 10-14; Brann and Kent, 1960, p. 478

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Hamilton Bluff, Alabama R. (type); *Dale Co.*, Ozark

*Types*.—Syntypes, Nos. 606-610 PRI

***Nuculana parilis* (Conrad)****Nuculanidae**

*Nucula parilis* Conrad, 1848b, p. 132, pl. 14, fig. 31; Clark, 1896, p. 93; Schenck, 1934, p. 52

*Nuculana parilis* (Conrad), Conrad, 1865a, p. 13

*Leda parilis* (Conrad), Clark and Martin, 1901, p. 199, pl. 57, figs. 1, 2, 2a

*Range*.—Paleocene. Aquia fm. (type)

*Localities*.—MD.: *Prince Georges Co.*, Upper Marlboro (type); *Anne Arundel Co.*, Sheckel's farm near South R.

*Type*.—Probable holotype, No. 30687 ANSP Moore, 1962, p. 83

**Nuculana parilis** (Conrad) "var."**Nuculanidae**

*Leda improcera* Conrad, Clark, 1896, p. 83 in part, pl. 28, fig. 1e

*Leda parilis* Conrad var., Clark and Martin, 1901, p. 200, pl. 57, fig. 3 copy Clark, 1896

*Range*.—Lower Eocene. Nanjemoy fm.

*Localities*.—VA.: King George Co., probably Woodstock. MD.:

Prince Georges Co., Hills Bridge

*Type*.—Figured specimen, USNM

*Nuculana parva* (Rogers and Rogers)

See *Saccella parva* (Rogers and Rogers)

*Nuculana pharcida* (Dall)

See *Calorhadia* (*Calorhadia*) *pharcida* (Dall)

**Nuculana plana** (Lea)**Nuculanidae**

*Nucula plana* Lea, 1833, p. 199, pl. 6, fig. 213; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 35; Schenck, 1934, p. 53. *N. plana* has usage over page preference of *N. pulcherrima*

*Nucula pulcherrima* Lea, 1833, p. 84 in part, pl. 3, fig. 63; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 102 in part; Harris, 1895b, p. 37 in part; Schenck, 1934, p. 53

*Nuculana plana* (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Cossmann, 1893, p. 15

*Nuculana pulcherrima* (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 4; Cossmann, 1893, p. 15

*Leda plana* (Lea), de Gregorio, 1890, p. 188, pl. 23, fig. 5 copy Lea; Harris, 1919, p. 60, pl. 23, figs. 14, 15; figs. 16, 17 copies of *N. pulcherrima* Lea; Brann and Kent, 1960, p. 478

*Leda pulcherrima* (Lea), Meyer, 1887a, p. 15; de Gregorio, 1890, p. 190, pl. 23, fig. 12 copy Lea

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). N.C.: Craven Co., "17 mi. above Newbern", Neuse R. (Harris)

*Type*.—Holotype, No. 5998 ANSP

*Nuculana plicata* (Lea)

See *Calorhadia bella* (Conrad)

*Nuculana protexta* Conrad, 1865c, p. 147

See *Calorhadia* (*Calorhadia*) *pharcida* (Dall)

*Nuculana pulcherrima* (Lea)

See *Nuculana plana* (Lea)

See also *Calorhadia* (*Calorhadia*) *opulenta* (Conrad)

*Nuculana regina-jacksonis* (Harris)

See *Calorhadia* (*Calorhadia*) *regina-jacksonis* (Harris)

*Nuculana regina-jacksonis* (Harris) var.

See *Calorhadia* (*Calorhadia*) *regina-jacksonis* (Harris) "var."

*Nuculana* (*Saccella*) *robusta* (Aldrich)

See *Saccella robusta* (Aldrich)



**Nuculana saffordana** (Harris)**Nuculanidae**

*Leda protexta* Gabb, 1860d, p. 397, pl. 68, fig. 36 (not fig. 35 as in text); not *Leda protexta* Gabb, 1860a, p. 303, pl. 48, fig. 23 [= *Nuculana protexta* (Gabb) Cretaceous]

*Leda saffordana* Harris, 1896, p. 55, pl. 4, fig. 9; Dall, 1898b, p. 586; ? Gardner, 1935, p. 117

"*Leda*" *saffordana* Harris, Rutsch, 1943, p. 149

*Range*.—Paleocene. Kincaid fm., lower Midway gr.; Naheola fm., upper Midway gr. (type)

*Localities*.—TENN.: *Hardeman Co.* (type), 2 mi. S. of Middleton. ALA.: *Wilcox Co.*,  $\frac{1}{2}$  mi. N. of Snow Hill. GA.: Chattahoochee R. (near base of Eocene). ? TEXAS: *Falls Co.*, Little Brazos R., above Rocky Crossing on Kosse rd.

*Type*.—Holotype, unknown. Type was in Safford Coll. seen by Harris, 1896

*Nuculana semen* (Lea)

See *Calorhadia semen* (Lea)

[*Nuculana*] *smirna* (Dall)

See *Jupiteria smirna* (Dall)

**Nuculana subtrigona** (Conrad)**Nuculanidae**

*Nucula subtrigona* Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 4; H. C. Lea, 1849, p. 102; Schenck, 1934, p. 54

*Leda subtrigona* (Conrad), Conrad, 1854, p. 29; Harris, 1919, p. 70, pl. 25, fig. 18. Specimens in ANSP so labelled compared to *L. houstonia* Harris, 1919, p. 59

*Nuculana subtrigona* (Conrad), Conrad, 1865a, p. 14; Conrad, 1866a, p. 4

*Range*.—Middle Eocene [—horizon uncertain *vide* Harris, 1919, p. 70]. McBean fm. (*vide* Cooke), upper Claiborne gr.

*Locality*.—S.C.: *Calhoun Co.*: "St. Matthews Parish, Orangeburg District" (type)

*Type*.—Missing ANSP Moore, 1962, p. 100

**Nuculana trivitate** (Gardner)**Nuculanidae**

*Leda houstonia* Harris, 1919, p. 59 in part, pl. 23, fig. 13. Not *L. houstonia* Harris, 1895a, p. 47

*Leda trivitate* Gardner, 1927, p. 363, fig. 5

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—TEXAS: *Wilson Co.*, Bluff on San Antonio R., 4 mi. SSE. of Floresville (type); *Houston Co.*, Alabama Ferry, Trinity R.

*Type*.—Holotype, No. 369248 USNM

**Nuculana trumani** (Harris)**Nuculanidae**

*Leda trumani* Harris, 1919, p. 61, pl. 23, figs. 18, 19; Brann and Kent, 1960, p. 480

*Range*.—Middle Eocene. Cook Mt. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type); Hamilton Bluff, Alabama R. S.C.: *Orangeburg Co.*, 3 and 6 miles WNW. of Orangeburg. GA.: *Clay Co.*, Ft. Gaines

*Type*.—Holotype, No. 585 PRI

**Nuculana tysoni** (Clark and Martin)**Nuculanidae**

*Leda tysoni* Clark and Martin, 1901, p. 201, pl. 57, figs. 4, 4a, 5

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—MD.: Charles Co., Popes Cr.; 2 ¼ to 3 mi. above Popes Cr.; Prince Georges Co., 1 mi. SE. of Piscataway. VA.: King George Co., Woodstock (type)

*Types*.—Syntypes, USNM

**Nuculana vanuxemi** (Dall)**Nuculanidae**

*Nucula mucronata* Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 2; H. C. Lea, 1849, p. 102. Not James de C. Sowerby, 1824, p. 120, pl. 476, fig. 4

*Nuculana mucronata* (Conrad), Conrad, 1865a, p. 13 not Vicksburg as in Conrad

*Leda vanuxemi* Dall, 1898b, p. 578 new name for *Nucula mucronata* Conrad; Harris, 1919, p. 70, pl. 25, fig. 16 copy Conrad, 1848b, *Nucula mucronata* Conrad

See also under *Calorhadia semen* (Lea) with question.

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

*Type*.—Holotype, "Vanuxem Coll." not listed Moore, 1962

**Nuculana wautubbeana** (Harris)**Nuculanidae**

*Leda wautubbeana* Harris, 1919, p. 69, pl. 25, figs. 15, 15a; Brann and Kent, 1960, p. 480

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: Clarke Co., Wautubbee (holotype); Newton Co., Newton (paratype). LA.: Winn Par., Calvin

*Types*.—Holotype, No. 611 PRI; paratype, Aldrich Coll. lost

*Nuculana* sp. Harris and Palmer, 1946

See *Ledina* sp.

See also *Saccella* sp.

**Nuculana** sp.**Nuculanidae**

*Leda*, n. sp. Gardner, 1935, p. 119, pl. 6, figs. 3, 4

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: Medina Co., USGS Sta. 11771, 5 mi. SE. of Elstone

*Type*.—Figured specimen, No. 370958 USNM

**Nuculana** sp.**Nuculanidae**

*Nuculana* sp. Harris, 1951, p. 15, pl. 7, figs. 2, 3; Brann and Kent, 1960, p. 610

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—GA.: Houston Co., Georgia Lime Rock Quarry, 3.9 mi. from Perry

*Types*.—Figured specimens, Nos. 24470, 24471 PRI

**Nuculana sp.****Nuculanidae**

*Nuculana* sp. Barry, 1942+, p. 46

*Range*.—Lower Eocene. Pendleton Ferry fm., middle Wilcox [Sabine] gr.

*Locality*.—LA.: Sabine Par., stream bank in SW.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  SE.  $\frac{1}{4}$  sec. 3, T. 5 N., R. 13 W.

*Type*.—Figured specimen, No. 5373 LSU Pal. Mus.

*Nucularia secunda* (Whitfield)

See *Nucula secunda* Whitfield

**Odontogryphaea thirsae (Gabb)****Ostreidae**

*Ostrea emarginata* Tuomey (name only), 1858, pp. 266, 269, 271

*Gryphaea thirsae* Gabb, 1862a, p. 329; Aldrich, 1886, p. 58

*Ostrea thirsae* (Gabb), Heilprin, 1884c, p. 311, pl. 63, figs. 4-6; de Gregorio, 1890, p. 178, pl. 20, figs. 2, 9, 10 copies Heilprin; Cossmann, 1893, p. 19; Harris, 1897b, p. 40, pl. 6, figs. 5, 5a, 6; Dall, 1898b, pp. 680, 681; Harris, 1899b, p. 300, pl. 53, fig. 1; Schuchert, *et al.*, 1905, p. 474; Veatch, 1906, p. 35, pl. 18, figs. 2, 2a copies Heilprin; cf. Maury, 1912, p. 39, pl. 5, figs. 6-8; Cooke, 1926a, pl. 94, figs. 6a, b; Semmes, 1929, fig. 59-6a, 6b; Trowbridge, 1932, pl. 39, figs. 3-5 copy Harris, 1897b; Barry, 1942+, p. 51, pl. 3, figs. 7, 8; Wasem and Wilbert, 1943, pp. 188, 192, pl. 31, fig. 2; Gardner, 1945, p. 76 in part, pl. 5, figs. 16, 18 holotype; figs. 15, 17, 19; Richards, 1948, p. 2, pl. 4, fig. 23; Brann and Kent, 1960, p. 642

*Ostrea cf. thirsae* (Gabb), Richards, 1950, p. 15

*Odontogryphaea thirsae* (Gabb), Stenzel, 1947, p. 166

*Range*.—Lower Eocene. Nanafalia fm. (type), lower Wilcox [Sabine] gr.; Marthaville fm., lower Wilcox [Sabine] gr.; Pendleton Ferry fm., middle Wilcox [Sabine] gr.; Tuscahoma fm., middle Wilcox [Sabine] gr.

*Localities*.—ALA.: Marengo Co. "Nanafalia" [Bluff], Tombigee R. (type); not Eufaula (as in Schuchert, *et al.*, 1905). GA.: Clay Co., between Fort Gaines and Woods Shoals. LA.: Natchitoches Par., Marthaville. See Barry, 1942+, p. 52 for further La. localities. N.C.: Johnston Co., about 3 mi. W. of Clayton

*Type*.—Lectotype, No. 494957 ["570"] USNM

The information regarding the type of *O. thirsae* is confusing in Schuchert, *et al.*, 1905, "USNM 570 . . . pleisotype . . . Eocene Eufaula Alabama."

Druid Wilson kindly supplied the following information regarding the discrepancy of type, locality, and age.

"570/Gryphaea thirsae Gabb/Eufaula, Ala./Cretaceous Ripley Group/Prepared by State Univ. of Alabama.

"One of these specimens was figured by Heilprin in White, 1884a and the same specimen was figured by Gardner as holotype 1945 (GSA Mem. 11) at which time it was recatalogued thus:

494957/"570"/*Ostrea thirsae* Gabb/Nanafalia, Marengo Co., Ala./Wilcox/Figd. holotype.

"The earliest label now with the specimen is Heilprin's which gives 'Eocene/Eufaula, Ala.'

"All of this leaves unexplained the source of Gabb's quoted 'Nanafalia' a locality that subsequent collections uphold.

"There probably were older labels giving Nanafalia and the catalogue must be in error, but there is no contemporary evidence to prove it.

"The specimen apparently is the one measured by Gabb and would be the obligatory lectotype; the other two syntypes have not been found.

"Schuchert's, Dall's, *et al.* listing of USNM 570 as Plesiotype probably resulted from their not realizing that it was a part of Gabb's original material."

*Omnivenus discoidalis* (Conrad)

See *Rhaddopitaria discoidalis* (Conrad)

**Orthoyoldia claibornensis** (Conrad)

**Nuculanidae**

*Nucula claibornensis* Conrad, 1848b, p. 131, pl. 14, fig. 22; Harris, 1895b, p. 11

*Nuculana claibornensis* (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

*Leda claibornensis* (Conrad), de Gregorio, 1890, p. 189, pl. 22, figs. 32, 33; 35, 36; fig. 34 copy Conrad

*Yoldia claibornensis* (Conrad), Dall, 1898b, p. 594, 596; Harris, 1919, p. 72, pl. 25, fig. 24 copy Conrad

*Orthoyoldia claibornensis* (Conrad), Stewart, 1930, p. 61; Stenzel, Krause, and Twining, 1957, pp. 53, 55 "a dubious species"

*Range*.—Middle Eocene. Claiborne gr., horizon unknown

*Locality*.—ALA.: Monroe Co., "Claiborne", Alabama R. (type) Conrad, (exact horizon unknown)

*Type*.—Missing ANSP *fide* Harris 1895b, p. 11; Moore, 1962, p. 48

**Cf. Orthoyoldia kindlei** (Harris)

**Nuculanidae**

*Yoldia kindlei* Harris, 1896, p. 56, pl. 4, fig. 6; Dall, 1898b, p. 594;

Harris and Veatch, 1899, p. 72; Barry, 1942+, p. 47, pl. 2, fig. 10;

Brann and Kent, 1960, p. 983

*Range*.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr., (Sabine and Natchitoches Par., La.); undifferentiated Midway (Tenn.) (type)

*Localities*.—TENN.: Hardeman Co., 1  $\frac{3}{4}$  mi. N. of Crainesville, at Hannah's (type). LA.: Natchitoches Par., Rocks Cr.; Sabine Par., ravine center of NW.  $\frac{1}{4}$  sec. 1, T. 9 N., R. 12 W.; 2  $\frac{1}{2}$  mi. NE. of Pleasant Hill in SW.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  sec. 23, T. 10 N., R. 11 W.

*Type*.—Holotype, No. 35 PRI

**Orthoyoldia psammotaea** (Dall)

**Nuculanidae**

*Yoldia psammotaea* Dall, 1898b, p. 596, pl. 34, fig. 20 (section *Orthoyoldia*); Schuchert, *et al.*, 1905, p. 702

*Yoldia psammotaea* Dall, Harris, 1919, p. 72 in part, pl. 25, figs. 25, 27, 29 (not figs. 26, 28=*Orthoyoldia* sp., not fig. 30=var. *orangeburgensis*, not fig. 31=var. *vivianensis*); Renick and Stenzel, 1931, p. 104; Brann and Kent, 1960, pp. 983, 984

*Orthoyoldia psammotaea* (Dall), Stewart, 1930, p. 61; Gardner, 1945, p. 50, pl. 4, figs. 2, 3; Stenzel, Krause, and Twining, 1957, p. 54, pl. 4, figs. 26-30

? *Yoldia* cf. *Y. psammotaea* [*sic*] Dall, Trowbridge, 1932, pl. 43, fig. 1 (questionable)

*Yoldia* (*Nuculana* ?) *psammotaea* Dall, Harris and Palmer, 1946, p. 57 in part, pl. 13, figs. 20, 21 (same specimen as Harris, 1919, pl. 25, fig. 29)



*Range*.—Middle Eocene. Viesca mem., Weches fm., middle Claiborne gr.; Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type), ["Claiborne sands, Claiborne, Ala." type locality incorrect *vide* Harris, 1919, p. 72.] Lisbon Bluff, Alabama R.; Hamilton Bluff, Alabama R. TEXAS: *Brazos Co.*, Little Brazos R., 2½ mi. above Stone City; *Burleson Co.*, Stone City Bluff, Brazos R.; Cedar Cr.; *Bastrop Co.*, Smithville, Colorado R. ? S.C.: *Calhoun Co.*, Kitts Ravine [Keitts]. See Harris, 1919, for additional localities not verified.

*Type*.—Holotype, No. 129799 USNM

**Orthoyoldia psammotaea orangeburgensis (Harris)                      Nuculanidae**

*Yoldia psammotaea* var. *orangeburgensis* Harris, 1919, p. 73, pl. 25, fig. 30; Brann and Kent, 1960, p. 984

*Orthoyoldia psammotaea orangeburgensis* (Harris), Stenzel, Krause, and Twining, 1957, p. 55

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Localities*.—S.C.: *Orangeburg Co.*, 5 mi. N. (type); NW. of Orangeburg

*Type*.—Holotype lost prior to 1937 PRI

**Orthoyoldia psammotaea vivianensis (Harris)                      Nuculanidae**

*Yoldia psammotaea* var. *vivianensis* Harris, 1919, p. 73, pl. 25, fig. 31; Brann and Kent, 1960, p. 984

*Orthoyoldia psammotaea vivianensis* (Harris), Stenzel, Krause, and Twining, 1957, p. 55

*Range*.—Middle Eocene. Recklaw fm. (type), middle Claiborne gr. [*vide* Stenzel, Krause, and Twining, 1957, p. 55]

*Locality*.—LA.: *Caddo Par.*, Vivian (type)

*Type*.—Holotype, No. 616 PRI

**Orthoyoldia rubamnis (Harris)                      Nuculanidae**

*Yoldia psammotaea* ? var. *rubamnis* Harris in Harris and Palmer, 1946, p. 58, pl. 14, fig. 1; Wilbert, 1953, pp. 98, 122; Brann and Kent, 1960, p. 984

*Orthoyoldia rubamnis* (Harris), Stenzel, Krause, and Twining, 1957, p. 53

*Range*.—Upper Eocene. White Bluff fm. (type), lower Jackson gr.

*Locality*.—ARK.: *Jefferson Co.*, White Bluff, Arkansas R. (type)

*Type*.—Holotype, No. 4231 PRI

**Orthoyoldia sp.                      Nuculanidae**

*Yoldia psammotaea* Dall, Harris, 1919, p. 72 in part, pl. 25, fig. 26; Brann and Kent, 1960, p. 984

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.

*Type*.—Figured specimen, No. 614 PRI



**Orthoyoldia** sp.**Nuculanidae**

*Yoldia psammotaca* Dall, Harris, 1919, p. 72 in part, pl. 25, fig. 28

*Range*.—Middle Eocene. McBean fm., upper Claiborne gr.

*Locality*.—S.C.: *Calhoun Co.*, Kitts [Keitts] Ravine

*Type*.—Figured specimen, missing USNM 1962

**Orthoyoldia** ? sp.**Nuculanidae**

*Yoldia* (*Nuculana* ?) *psammotaca* Dall "var.", Harris and Palmer, 1946, p. 57, pl. 13, fig. 17 as *Yoldia* sp.

*Yoldia* sp., Brann and Kent, 1960, p. 984

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

*Locality*.—LA.: *Grant Par.*, Montgomery, Red R.

*Type*.—Figured specimen, No. 4228 PRI

**Orthoyoldia** ? sp.**Nuculanidae**

*Yoldia* (*Nuculana* ?) *psammotaca* Dall "var.", Harris and Palmer, 1946, p., 57, pl. 13, fig. 19 as *Yoldia* sp.

*Yoldia* sp., Brann and Kent, 1960, p. 984

*Range*.—Upper Eocene. Jackson gr.

*Locality*.—ALA.: *Clarke Co.*, Little Stave Cr. near Jackson

*Type*.—Figured specimen, No. 4229 PRI

**Orthoyoldia** ? sp.**Nuculanidae**

*Yoldia* (*Nuculana* ?) *psammotaca* Dall "var.", Harris and Palmer, 1946, p. 57, pl. 13, fig. 19 as *Yoldia* sp.

*Yoldia* sp. Brann and Kent, 1960, p. 984

*Range*.—Upper Eocene. White Bluff fm., lower Jackson gr.

*Locality*.—ARK.: *Jefferson Co.*, White Bluff, Arkansas R.

*Type*.—Figured specimen, No. 4230 PRI

**Oryctomya bryani** (Clark)**Arcticidae**

*Coralliophaga bryani* Clark, 1895, p. 5; Clark, 1896, p. 73, pl. 15, figs. 2a, 2b; Clark and Martin, 1901, p. 183, pl. 43, figs. 1, 1a; figs. 2, 2a copy holotype; Dall, 1903a, p. 1500 *O. Bryani*; Schuchert, *et al.*, 1905, p. 163

*Range*.—Paleocene. Aquia fm. (type)

*Localities*.—MD.: *Charles Co.*, 1 mi. SE. of Mason Springs; *Prince Georges Co.*, "Pamunkey Neck" (type)=Pomonkey Clark and Martin

*Type*.—Holotype, No. 115804 USNM

**Oryctomya claibornensis** Dall**Arcticidae**

*Coralliophaga* (*Oryctomya*) *claibornensis* Dall, 1898a, p. 135; Harris, 1919, p. 154, pl. 48, figs. 5, 5a copy Dall

*Oryctomya claibornensis* Dall, Dall, 1898b, p. 929, pl. 34, figs. 16, 16a; Dall, 1903a, p. 1499; Schuchert, *et al.*, 1905, p. 467

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 129541 USNM

**Cf. *Oryctomya prima* (Harris)****Arcticidae**

*Coralliophaga prima* Harris, 1897b, p. 60, pl. 13, figs. 4, 4a, 5; Dall, 1898a, p. 135; Brann and Kent, 1960, p. 251

*Oryctomya prima* (Harris), Dall, 1903a, p. 1500

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr. (possibly also middle Wilcox [Sabine] gr., Harris, 1897b)

*Localities*.—ALA.: NE. Washington Co., Hatchetigbee Bluff, Tombigbee R. (type); Monroe Co., Greggs Ldg., Alabama R. (probably)

*Types*.—Syntypes, Nos. 172, 173 PRI

*Ostrea alabamiensis* Lea

See *Crassostrea alabamiensis* (Lea)

*Ostrea alabamiensis* Lea, Harris, 1897b

See *Crassostrea* sp.

*Ostrea alabamiensis* of authors, not Lea, 1833

See *Crassostrea amichel* (Gardner)

*Ostrea alabamiensis* Lea, Harris in Harris and Palmer, 1946

See *Crassostrea* sp.

*Ostrea alabamiensis* Lea, Renick and Stenzel, 1931, not Lea, 1833

See *Crassostrea frionis* (Harris)

*Ostrea alabamiensis* Lea "var.", Harris, 1919

See *Crassostrea* sp.

*Ostrea alabamiensis* (var. *contracta*) Conrad, Harris, 1919

See *Crassostrea gigantissima* (Finch)

See also *Crassostrea contracta* (Conrad)

*Ostrea alabamiensis frionis* Harris

See *Crassostrea frionis* (Harris)

*Ostrea alabamiensis georgiana* Conrad

See *Crassostrea contracta* (Conrad)

See also *Crassostrea gigantissima* (Finch)

*Ostrea alabamiensis linguaecanis* Lea, de Gregorio, 1890

See *Crassostrea alabamiensis* (Lea)

*Ostrea alabamiensis pincerna* de Gregorio

See *Crassostrea alabamiensis* (Lea)

*Ostrea alabamiensis semihunata* Lea

See *Crassostrea alabamiensis* (Lea)

***Ostrea alepidota* Dall****Ostreidae**

*Ostrea compressirostra* var. *alepidota* Dall, 1898b, p. 680; Clark and Martin, 1901, p. 191

*Range*.—Paleocene, Aquia fm. (type)

*Localities*.—MD.: Prince Georges Co., Fort Washington. VA.: Stafford Co., Aquia Cr. (type). S.C.: "Eocene" Dall

*Type*.—Not found USNM 1962

The form was never figured. The type is not available, hence its relationship is indefinite.

**Ostrea (Ostrea) arrosis Aldrich****Ostreidae**

*Ostrea arrosis* Aldrich, 1904, p. 61, pl. 3, figs. 1-4

See *O. intermedioides* Aldrich, 1921, pl. 3, figs. 15, 16

*Range*.—Lower Eocene. Nanafalia fm. (type), lower Wilcox [Sabine] gr.

*Locality*.—ALA.: Dale Co., Fleming's Mill on Pea R., near center sec. 7, T. 7 N., R. 23 E., near Beck Mill (type)

*Types*.—Syntypes, Nos. 639026, 639027, 639028 USNM

*Ostrea bellovacina* Conrad, 1842b, p. 172; not Lamarck, 1806a, p. 159

See *Ostrea sinuosa* Rogers and Rogers

**Ostrea bryani Gabb****Ostreidae**

*Ostrea Bryanii* Gabb, 1877, p. 321

*Ostrea bryani* Gabb, White, 1884a, p. 293; Weller, 1907, p. 448, pl. 44, figs. 1-5

*Gryphaea Bryani* (Gabb), Whitfield, 1885, p. 206, pl. 27, figs. 6-9 syntypes, Whitfield, 1899, p. 158

*Gryphaea Bryani* var. *precedens* Whitfield, 1885, p. 194, pl. 26, figs. 7, 8; Whitfield, 1899, p. 158; Weller, 1907, p. 448 under *O. bryani* Gabb

*Ostrea glandiformis* Whitfield, 1885, p. 205, pl. 27, figs. 1-5; Whitfield, 1899, p. 162; Weller, 1907, p. 449 under *O. bryani* Gabb

*Gryphaea bryanii* (Gabb), Johnson, 1905, p. 11

*Range*.—Lower Eocene. Vincentown fm. (type); Manasquan fm. Middle Eocene. Shark R. ml., upper Claiborne gr.

*Localities*.—N.J.: Burlington Co., Vincentown (type *O. bryani*; syntype *O. glandiformis*); Ocean Co., near New Egypt (type *O. precedens*); Monmouth Co., Farmingdale (syntype *O. glandiformis*); Shark R.; Squankum

*Types*.—*O. bryani* syntypes, ANSP; *O. glandiformis* Whitfield syntypes, State Mus., Trenton, N.J.; *O. bryani precedens* Whitfield, syntype 8975/1 AMNH

*Ostrea Camera* Tuomey, 1848, p. 154; Harris, 1919, p. 200 *nomen nudum*

**Ostrea carolinensis Conrad****Ostreidae**

*Ostrea Carolinensis* Conrad, 1832b, p. 27, pl. 14, fig. 1 (Harris reprint 1893, p. 45, pl. 14, fig. 1); Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 395; Conrad, 1865a, p. 15; Conrad, 1866a, p. 3; not Conrad, 1865f, p. 71 see *G. sylvaerupis* (Harris); not Conrad, 1865h, p. 266 see *G. sylvaerupis* (Harris); Heilprin, 1884c, p. 309; Dall, 1898b, p. 686 in part; Harbison, 1944, p. 4, pl. 4, fig. 2; Cooke and MacNeil, 1952, p. 24

*Range*.—Middle Eocene. Santee ls. (type), upper Claiborne gr.

*Locality*.—S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (type)

*Type*.—Missing ANSP Moore, 1962, p. 46

*Ostrea carolinensis* Conrad, 1865f, 1865h; not Conrad, 1832b

See *Gigantostrea sylvaerupis* (Harris)

*Ostrea claibornensis* Conrad ms. *nomen nudum*

See *Crassostrea alabamiensis* (Lea) [fide Harris, 1895b, pp. 3, 11]

"*Ostrea compressirostra* Say" of authors Eocene

See *Ostrea sinuosa* Rogers and Rogers

*Ostrea compressirostra* Say, Clark, 1896; Clark and Martin, 1901; Vokes 1961. Not Say, 1824b

See *Ostrea* sp.

*Ostrea compressirostra* Say, Tuomey, 1850; not Say, 1824b

See *Gigantostrea sylvaeurupis* (Harris)

*Ostrea compressirostra* Say, Clark

See *Ostrea* sp.

*Ostrea compressirostra* Say, Smith and Johnson, 1887; not Say, 1824b

See *Gigantostrea sylvaeurupis* (Harris)

*Ostrea compressirostra* Say, Langdon, 1894 not Say, 1824b

See *Ostrea crenulimarginata* Gabb

*Ostrea compressirostra* var. *alepidota* Dall

See *Ostrea alepidota* Dall

*Ostrea contracta* Conrad

See *Crassostrea contracta* (Conrad)

*Ostrea contracta amichel* Gardner

See *Crassostrea amichel* (Gardner)

#### ***Ostrea* ? *convexa* Say**

#### **Ostreidae**

*Ostrea convexa* Say, 1820, p. 42

*Gryphaea convexa* (Say), Weller, 1907, p. 451, pl. 45, figs. 1, 2 synonymy; Richards in Richards, *et al.*, 1958, p. 114, pl. 19, figs. 7-8 see for discussion.

*O. convexa* a common Cretaceous species was described from the Cretaceous. It is still in an indefinite state of specific determination.

*Range*.—Upper Cretaceous (type). Paleocene. Hornerstown fm.

*Localities*.—N.J.: Burlington Co., Burlington (type); Ocean Co., New Egypt; Salem Co., Woodstown

*Type*.—[?] Originally ANSP

#### ***Ostrea crenulimarginata* Gabb**

#### **Ostreidae**

*Ostrea denticulifera* Gabb, 1860d, p. 398, not Conrad, 1858c, p. 330; Safford, 1869, p. 419 not Conrad, 1858c, p. 330

*Ostrea crenulimarginata* Gabb, 1860d, p. 398, pl. 68, figs. 40, 41; White, 1884a, p. 294, pl. 40, fig. 2 copy Gabb; Harris, 1896, p. 45, pl. 1, figs. 1, 1a; pl. 2, figs. 1, 1a copies *O. tumidula* Aldrich, pl. 3, fig. 1; Dall, 1898b, p. 667; ? Harris, 1899b, p. 297, pl. 52, figs. 1, 1a; Veatch, 1906, p. 33, pl. 16, fig. 2, 2a copy *O. tumidula* Aldrich; cf. Maury, 1912, p. 36, pl. 5, fig. 11; pl. 6, fig. 1-4 copies Aldrich, 1894b *O. tumidula*, and Harris, 1896; Deussen, 1924, p. 43, pl. 14, figs. 2, 2a copies *O. tumidula* Aldrich; Cooke, 1926a, pl. 93, figs. 5a, 5b; Semmes, 1929, fig. 51-5a, 5b; Trowbridge, 1932, pl. 30, figs. 5, 6; Gardner, 1935, p. 139, pl. 10, fig. 2; pl. 11, fig. 9; Toulmin and La Moreaux, 1963, p. 394

*Ostrea prae-compressirostra* Harris, 1894b, p. 39; Schuchert, *et al.*, 1905, p. 471

*Ostrea tumidula* Aldrich, 1894b, p. 242, pl. 14, figs. 1, 2; pl. 15, figs. 1, 2

*Ostrea compressirostrea* Say, Langdon, 1894, p. 413 not Say, 1824b

*Range*.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.; Clayton fm., lower Midway gr. (type)

*Localities*.—TENN.: *Hardeman Co.*, 2 mi. E. of Middleton (type); 2 mi. S. of Middleton; Muddy Cr. E. of Middleton; McDonald's mill, 4 mi. SW. of Middleton. ARK.: "Midway cf.", *Pulaski Co.*, well at Little Rock. ALA.: *Wilcox Co.*, 1 mi. N. of Midway; 1 mi. W., 1½ mi. SW. and 1 mi. S. of Palmer's mill; *Prairie Cr. LA.*: *Sabine Par.*, Raines place near Rocky Spring church, about 6 mi. WSW. of Marthaville. "Also near Cretaceous-Eocene borderline in Texas, Arkansas, Tennessee, Mississippi, Alabama, and Georgia", Harris, 1899b, p. 298. For additional Texas localities see Gardner, 1935, p. 140. GA.: Chattahoochee R. area (see Toulmin and La Moreaux, 1963)

*Types*.—Syntypes *Ostrea crenulimarginata* Gabb unknown; types in Safford Coll. seen by Harris, 1896. Syntypes *O. praecompressirostra* Harris, No. 107336 USNM, not found, 1962. Syntypes (2) *Ostrea tumidula* Aldrich left valve No. 106, right valve No. 107 GSATC

*Ostrea cretacea* Morton, Aldrich, 1895b

See *Ostrea* spp.

*Ostrea denticulifera* Conrad

See *Ostrea crenulimarginata* Gabb

#### ***Ostrea* ? *dissimilaris* (Weller)**

**Ostreidae**

*Gryphaea dissimilaris* Weller, 1907, p. 453, pl. 46, figs. 2, 3 [not, 4 as ex pl.]

*Range*.—Paleocene. Hornerstown fm. (type)

*Localities*.—N.J.: *Salem Co.*, 2 mi. NE. Woodstown (type); *Gloucester Co.*, 1 mi. SE. of Mullica Hill; *Ocean Co.*, Crosswicks Creek, 1 mi. N. of New Egypt

*Type*.—Holotype, No. 7488 State Mus. Trenton, N.J.

*Ostrea divaricata* Lea

See *Cubiostrea* (*Cubiostrea*) *divaricata* (Lea)

#### ***Ostrea* (*Ostrea*) *duvali* Gardner**

**Ostreidae**

*Ostrea duvali* Gardner, 1927, p. 366, figs. 1-4

*Ostrea multilirata* Conrad var. *duvali* Gardner, Stenzel, 1957a, p. 888

*Range*.—Lower Eocene. Probably Indio fm. (type), lower Wilcox [Sabine] gr.

*Localities*.—TEXAS: *Bastrop Co.*, Austin-Elgin Ferry rd., 1 mi. N. of Austin-Bastrop Highway (type); Caldwell Knob; *Guadalupe Co.*, 1 mi. NE. of New Berlin

*Types*.—Syntypes, No. 369239 USNM

*Ostrea emarginata* Tuomey

See *Odontogryphaea thirsae* (Gabb)

*Ostrea eversa* "Mellville" Heilprin, 1884c, p. 310 in part

See *Ostrea* (*Gryphaeostrea*) *subversa* Conrad nomen nudum

#### ***Ostrea falciformis* Conrad [*Cubitostrea*]**

**Ostreidae**

*Ostrea falciformis* Conrad, 1863a, p. 291 in part "Enterprise, Miss."; Conrad, 1865b, p. 140 in part, pl. 11, fig. 1 "Enterprise, Miss." = Garland Creek, Miss., Jackson Eocene, *vide* Aldrich, 1885c, p. 307;



Conrad, 1866a, p. 3 "Ala."; Heilprin, 1884c, p. 311; de Gregorio, 1890, p. 175 under *O. sellaeformis*, pl. 20, figs. 5, 6 copy Conrad; Dall, 1898b, p. 677 under *O. sellaeformis*. Not *O. falciformis* Goldfuss, 1833, p. 22; 1862 (2 ed.), p. 21

*Ostrea (Cubitostrea) falciformis* Conrad, Sacco, 1897b, p. 14

In part *Cubitostrea (Cubitostrea) sanctiaugustini* Stenzel and Twining, 1957, p. 93 "new name for *Ostrea falciformis* Conrad, 1865"

*Ostrea falciformis* Conrad is ambiguous as to locality and age. Conrad stated the species was from Enterprise, Miss., from Dr. Spillman. Aldrich (1885c, p. 307) proved that Conrad was in error, and the Spillman Enterprise material was probably from Garland Cr., Miss., Jackson Eocene. However, the figures of Conrad, 1865b are not that of a Jackson species but do appear similar to the *C. sellaeformis* stock and particularly *C. sanctiaugustini* Stenzel and Twining. But because there is uncertainty concerning *O. falciformis* Conrad it would be better not to attach the name *C. sanctiaugustini* to it as was indicated by Stenzel and Twining. If *C. sanctiaugustini* is a new name for *O. falciformis* Conrad, it should have the same type and type locality as *O. falciformis*. But Stenzel and Twining used a new type from the Weches fm. near San Augustine, Tex. Although the figure of Conrad is similar to that of Stenzel and Twining we doubt the propriety of combining the two names. We, therefore, retain *O. falciformis* status uncertain, new name required, but not worthy of renaming. We limit *C. sanctiaugustini* to Claiborne gr., Texas.

*Types*.—Probable syntypes (2), No. 13232 ANSP Moore, 1962, p. 60

*Ostrea falciformis* Conrad, 1863a, in part; 1865b in part

See *Cubitostrea (Cubitostrea) sanctiaugustini* Stenzel and Twining in part

## ***Ostrea falco* Dall**

## **Ostreidae**

*Ostrea falco* Dall, 1896b, p. 22; Dall, 1898b, p. 682, pl. 30, figs. 4, 11; Schuchert, *et al.*, 1905, p. 469; Cooke, 1926a, p. 274, pl. 96, fig. 4; Kellum, 1926, p. 18; Semmes, 1929, fig. 62-4; Harris and Palmer, 1946, p. 20, pl. 3, figs. 1-9 "var."; cf. Richards and Palmer, 1953, p. 45 unfigured; Brann and Kent, 1960, p. 634

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—ALA.: Choctaw Co., Cocoa P.O. (type); Waynesboro rd. about 5 mi. W. of Silas. MISS.: Clarke Co., 2 mi. E. of Shubuta. LA.: Grant Par., Montgomery, Red R.

*Types*.—Syntypes, No. 129972 USNM

*Ostrea flabellula* ? Lamarck, H. C. Lea, 1849, p. 103; Heilprin, 1884c, p. 310. Not *O. flabellula* Lamarck, 1806b, p. 164

See *Cubitostrea divaricata* (Lea).

*Ostrea frionis* Harris

See *Crassostrea frionis* (Harris)

## ***Ostrea frithi* Gardner**

## **Ostreidae**

*Ostrea frithi* Gardner, 1945, p. 82, pl. 2, figs. 7, 9

*Range*.—Upper Eocene. Upper Jackson gr. (type)

*Locality*.—TEXAS: Starr Co., oyster bed in SW. corner Antonio Canales Salinas, "Sacatosa" grant, 20 mi. N. Roma (type)

*Type*.—Holotype, No. 372918 USNM

*Ostrea georgiana* Conrad

See *Crassostrea gigantissima* (Finch)

***Ostrea gierharti* Gardner**

**Ostreidae**

*Ostrea gierharti* Gardner, 1945, p. 78, pl. 2, figs. 1-4

*Range*.—Middle Eocene. Mount Selman fm. (type), middle Claiborne gr.

*Locality*.—Mexican side of Rio Grande across from San Ygnacio, Zapata Co., Texas, USGS sta. 12972 (type)

*Types*.—Syntypes, No. 372916 USNM

*Ostrea gigantea* ? Vanuxem in Morton, 1828a, p. 69 *nomen nudum*

[could be error for *gigantissima*]

See *Crassostrea gigantissima* (Finch)

*Ostrea gigantissima* Finch

See *Crassostrea gigantissima* (Finch)

*Ostrea glandiformis* Whitfield

See *Ostrea bryani* Gabb

**"*Ostrea*" *glauconoides* Whitfield**

**Ostreidae**

*Ostrea glauconoides* Whitfield, 1885, p. 222, pl. 29, fig. 2; Dall, 1898b, p. 677 under *O. sellaeformis* Conrad; Whitfield, 1899, p. 162; Harris, 1919, p. 13

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Localities*.—N.J.: Monmouth Co., Shark R. (type). (Cf.) ALA.:

Monroe Co., base of Claiborne Bluff, Alabama R.

*Type*.—Holotype, No. 7840, State Mus., Trenton, N.J.

***Ostrea* (*Ostrea*) *intermedoides* Aldrich**

**Ostreidae**

*Ostrea intermedoides* Aldrich, 1921, p. 23, pl. 3, figs. 15, 16

*Ostrea* sp. cf. *O. intermedoides* Aldrich, Gardner, 1945, p. 77 in part

See *O. arrosis* Aldrich, 1904, pl. 3, figs. 3, 4 for similarity. Suggestive that this is young of *O. arrosis* Aldrich

*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

*Types*.—Syntypes, No. 48 GSATC

*Ostrea johnsoni* Aldrich

See *Alectryonia johnsoni* (Aldrich)

***Ostrea kochae* Gardner**

**Ostreidae**

*Ostrea kochae* Gardner, 1935, p. 140, pl. 8, figs. 1-5

? *Ostrea kochae* Gardner, Rutsch, 1943, p. 152

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: Medina Co., D'Hanis-Yancey rd., 7½ mi. E. by S. of D'Hanis (type)

*Types*.—Syntypes (2), No. 370962 USNM

*Ostrea lingua-canis* LeaSee *Crassostrea alabamiensis* (Lea)*Ostrea (Alectryonia ?) linguafelis* WhitfieldSee *Cubitostrea (Cubitostrea) linguafelis* (Whitfield)*Ostrea lisbonensis* HarrisSee *Cubitostrea ( ) lisbonensis* (Harris)*Ostrea mauriciensis* [sic] [Gabb], Dall, 1898b, p. 679; *O. mauricensis* Gabb, Dall, 1898b, pp. 684, 687Equals *Ostrea mauricensis* Gabb, Miocene*Ostrea mortoni* Aldrich, 1887 not Gabb, 1862aSee *Gigantostrea trigonalis* (Conrad)*Ostrea mortonii* GabbSee *Alectryonia vicksburgensis mortonii* (Gabb)***Ostrea (Ostrea) multilirata* Conrad****\* Ostreidae**

*Ostrea multilirata* Conrad in Emory, 1857, p. 157, pl. 12, figs. 1a-d; Heilprin, 1884c, p. 298, pl. 38, figs. 1, 2 copy Conrad; Schuchert, et al., 1905, p. 471; Gardner, 1926d, pp. 513, 514; Trowbridge, 1932, pl. 34, figs. 1, 2; pl. 35, figs. 1, 2 copies Gardner, 1923, *O. tasex*; Gardner, 1935, p. 141; Barry, 1942+, p. 52, pl. 4, figs. 1-4; Wasem and Wilbert, 1943, pp. 188, 192, pl. 31, fig. 1

Not *Ostrea georgiana* Conrad, Hilgard in Hopkins, 1871, p. 12 as in Barry, 1942+, p. 52

? *Ostrea crenulimarginata* Gabb, Harris, 1899b, p. 297, pl. 52, figs. 1, 1a fide Barry, 1942+

*Ostrea tasex* Gardner, 1923, p. 109, pl. 29, figs. 6, 7; pl. 31, figs. 1-4; Howe, 1925, p. 170; Gardner, 1926d, pp. 513, 514

*Range*.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.; Indio fm. (type), lower Wilcox [Sabine] gr.

*Localities*.—"Dry Creek, Mexico", Cretaceous (Conrad, type).

TEXAS: Dimmit Co.,  $\frac{1}{4}$  mi. NE. of Glass Ranch headquarters (type *O. tasex* Gardner). LA.: Sabine Par., Rocky Springs Church, N. bank of Bayou Dupont in SE.  $\frac{1}{4}$ , SW.  $\frac{1}{4}$ , SW.  $\frac{1}{4}$ , sec. 9, T. 8 N., R. 10 W.; rd. cut along La. Highway 42-D in SW.  $\frac{1}{4}$ , SE.  $\frac{1}{4}$ , sec. 25, T. 8 N., R. 12 W.; NE  $\frac{1}{4}$  sec. 24, T. 8 N., R. 11 W. (Howe 1925)

*Types*.—Syntypes, *O. multilirata* No. 9895 USNM. Syntypes, *O. tasex*, No. 352265 USNM

*Ostrea multilirata duvali* GardnerSee *Ostrea (Ostrea) duvali* Gardner***Ostrea (Ostrea) multilirata sabinalensis* Gardner****Ostreidae**

*Ostrea multilirata sabinalensis* Gardner, 1935, p. 142, pl. 9, figs. 1, 2

*Range*.—Paleocene. Pockets at top Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: Uvalde Co., Schuddemagen ranch, 11 mi. S. of Sabinal (type); S. bank of Elm Cr.

*Types*.—Syntypes (2), No. 370906 USNM

*Ostrea panda* Morton in partSee *Alectryonia vicksburgensis mortoni* (Gabb)

*Ostrea panda* Morton

St. George's, Delaware. Cretaceous

*Ostrea pandaeformis* GabbSee *Gigantostrea trigonalis* (Conrad)*Ostrea percrassa* Conrad, Dall, 1898b, p. 683 in part. Not Conrad, 1840, p. 50See *Gigantostrea sylvaerupis* (Harris)*Ostrea (Cubitostrea) perplicata* DallSee *Cubitostrea (Cubitostrea) perplicata* (Dall)*Ostrea pincera* [sic] Lea, Dall, 1898b, p. 679See *Crassostrea alabamiensis* (Lea)*Ostrea pincema* [sic] Lea, CossmannSee *Crassostrea alabamiensis* (Lea)*Ostrea pincerna* LeaSee *Crassostrea alabamiensis* (Lea)***Ostrea (Ostrea) podagrina* Dall****Ostreidae**

*Ostrea podagrina* Dall, 1896b, p. 22; Dall, 1898b, p. 682 "upper Eocene", pl. 30, figs. 5, 6 "Oligocene"; Schuchert, *et al.*, 1905, p. 471; Gardner, 1926a, p. 42 in part, pl. 10, figs. 5, 6 copy Dall, (not Chipola Miocene as stated by Gardner)

? "*Ostrea podagrina* Dall", Cooke, 1945, pp. 62, 64, 68 listed only

*Ostrea "podagrina"* Dall, Harris, 1951, p. 6 in part, pl. 1, fig. 5 USNM; pl. 2, fig. 1; pl. 2, figs. 2, 3 copy of type

*Range*.—Middle-upper Eocene (type). Age determined through presence of the larger Foraminifera, *Operculinoides floridensis* (Heilprin) by R. C. Douglass, 1961 (pers. com. D. Wilson).

*Localities*.—FLA.: Lafayette Co., "W. bank of Suwanee near the Sulphur Spring" (text), "Oligocene of Suwanee River", expl. pl. (type) see also Cooke, 1945, p. 68; cf. *Taylor Co.*, across Steinhatchee R. from Clara, USNM

*Type*.—Holotype, No. 135127 USNM

*Ostrea "podagrina"* Dall, Harris, 1951 in partSee also *Ostrea* sp.*Ostrea praecompressirostra* HarrisSee *Ostrea crenulimarginata* Gabb*Ostrea princerna* [sic] Lea, DallSee *Crassostrea alabamiensis* (Lea)***Ostrea (Ostrea) pulaskensis* Harris****Ostreidae**

*Gryphaea vomer* Morton, Safford, 1869, p. 419 name only, not *Gryphaea vomer* Morton, 1828b, p. 83; Langdon, 1894, p. 416, not of Morton

*Gryphaea pitcheri* Morton, Hilgard, 1869, p. 29

"*Gryphaea pitcheri* Morton?" White, 1882, p. 137 not *Gryphaea pitcheri* Morton, 1834, p. 55

*Ostrea pulaskensis* Harris, 1894b, p. 40, pl. 1, figs. 3, 3a-d; Harris, 1896, p. 46, pl. 1, figs. 2, 2a-c, 3, 3a; Dall, 1898b, p. 677; Harris, 1899b, p. 298, pl. 52, figs. 2-4; Schuchert, *et al.*, 1905, p. 472; Veatch, 1906, p. 33, pl. 16, figs. 3, 3a copies Harris, figs. 3b-3e; cf. Maury,

1912, p. 38, pl. 7, fig. 2; Deussen, 1924, p. 43, pl. 14, figs. 3, 3a copies Harris, figs. 3b-e copies Veatch; Cooke, 1926a, p. 256, pl. 93, fig. 6; Semmes, 1929, fig. 51-6; Trowbridge, 1932, p. 35, pl. 30, figs. 3, 4; Gardner, 1935, p. 137, pl. 11, fig. 7; fig. 8 copy Cooke; Brann and Kent, 1960, p. 637; Perrilliat Montoya, 1963, p. 6, pl. 3, figs. 2-4  
 ? *Ostrea cf. pulaskensis* Harris, Rutsch, 1943, p. 152

*Range*.—Paleocene. Clayton fm. lower Midway gr.; Kincaid fm., lower Midway gr.; Porters Creek fm., upper Midway gr. including Sucarnoochee clay and Matthews Ldg. beds: Midway, Arkansas (type)

*Localities*.—ARK.: *Pulaski Co.*, near Alexander (type); Kings salt works, sec. 35, [T.] 15 N., [R.] 8 W. TENN.: *Hardeman Co.*, Hannah's  $1\frac{3}{4}$  mi. N. of Crainesville; Huddleston's  $1\frac{3}{4}$  mi. W. of Crainesville; McDonald's mill, 4 mi. SW. of Middleton. MISS.: *Tippah Co.*,  $\frac{1}{2}$  mi. S. and 2 mi. E. of Ripley. ALA.: *Wilcox Co.*,  $\frac{3}{4}$  mi. W. and 1 mi. N. of Prairie Bluff; 1 mi. N. of Matthews Ldg., Alabama R.;  $1\frac{1}{2}$  mi. SW. of Palmer's mill;  $\frac{1}{2}$  mi. W. of Graveyard Hill. TEXAS: For localities in Texas—see Gardner, 1935, p. 138

*Types*.—Syntypes (2), No. 135138 USNM

*Ostrea radians* Conrad

See *Cubitostrea sellaeformis* (Conrad)

*Ostrea sellaeformis* Conrad

See *Cubitostrea sellaeformis* (Conrad)

*Ostrea sellaeformis* Conrad, Renick and Stenzel, 1931 var. 1

See *Cubitostrea (Cubitostrea) petropolitana* Stenzel and Twining

See also *Cubitostrea sellaeformis* Conrad var. 1, Renick and Stenzel, 1931

*Ostrea sellaeformis divaricata* Lea

See *Cubitostrea (Cubitostrea) divaricata* (Lea)

*Ostrea sellaeformis mut. laeta* de Gregorio

See *Cubitostrea sellaeformis* (Conrad)

*Ostrea sellaeformis lisbonensis* Harris

See *Cubitostrea* ( ) *lisbonensis* (Harris)

*Ostrea sellaeformis perplicata* Dall

See *Cubitostrea (Cubitostrea) perplicata* (Dall)

*Ostrea sellaeformis smithvillensis* Harris

See *Cubitostrea smithvillensis* (Harris)

*Ostrea sellaeformis Mut. vermilli* de Gregorio

See *Cubitostrea sellaeformis vermilli* (de Gregorio)

*Ostrea semihunata* Lea

See *Crassostrea alabamiensis* (Lea)

## ***Ostrea semmesi* Gardner**

## **Ostreidae**

*Ostrea semmesi* Gardner, 1945, p. 78, pl. 2, figs. 6, 8

*Range*.—Middle Eocene. Mount Selman fm., middle Claiborne gr. (type)

*Locality*.—TEXAS: *Frio Co.*, Goat pens of east side of Yancy rd., 3 mi. N. Moore (type)

*Types*.—Syntypes, No. 372917, USNM



**Ostrea sinuosa Rogers and Rogers****Ostreidae**

- Not *Ostrea compressirostra* Say, 1824b, p. 132, pl. 8, figs. 2a, 2b (reprint 1896, p. 38, pl. 8, figs. 2a, 2b); Conrad in Morton, 1834, p. 2; Rogers and Rogers, 1837, p. 366; H. C. Lea, 1849, p. 103
- Ostrea sinuosa* Rogers and Rogers, 1837, p. 340; Rogers and Rogers, 1839, pl. 27, fig. 1 [2 figs.] reprint, 1884, p. 668, pl. 2, fig. 1 [2 figs.]; H. C. Lea, 1849, p. 103; Conrad, 1865a, p. 15
- Ostrea bellovacina* Lamarck, Conrad, 1842b, p. 172; H. C. Lea, 1849, p. 103; Conrad, 1865a, p. 15 not Lamarck, 1806a, p. 159
- Ostrea compressirostra* Say, Tuomey, 1842a, p. 156; 1858, pp. 266, 271; Conrad, 1865a, p. 15; Conrad, 1866a, p. 3; Heilprin, 1884b, p. 85; Heilprin, 1884c, p. 309, pl. 65, figs. 1, 2; Aldrich, 1886, pp. 55, 57, 58; de Gregorio, 1890, p. 177, pl. 20 figs. 1, 8 copies Heilprin; Langdon, 1891, p. 603; Cossmann, 1893, p. 19; not Langdon, 1894, p. 413 = *O. crenulimarginata* Gabb, 1860d; Harris, 1894a, p. 302; Clark, 1895, p. 5; Clark, 1896, p. 86 in part, not pl. 37; pl. 38, figs. 1a, b, 2a-c; pl. 39, figs. 1, 2a, b; pl. 40, fig. 1 = *O. spp.*; Harris, 1897b, p. 37, pl. 1 copy Say; pls. 2, 3 copy Heilprin; pl. 6, fig. 1; Dall, 1898b, p. 679 in part; Clark and Martin, 1901, p. 190 in part, not pls. 45, 46, 47 same as Clark, 1896; Newton, 1902, p. 304; Schuchert, *et al.*, 1905, p. 468; Veatch, 1906, pl. 18, fig. 1 copy Heilprin; Brann and Kent, 1960, p. 631; not Vokes, 1961, p. 49, pl. 10, fig. 13 copy Clark, 1896, pl. 38, fig. 1a. Not Perrilliat Montoya, 1963, p. 4 in part, not pl. 2, fig. 1; pl. 4, fig. 1; pl. 5, fig. 1. Not Say, 1824b

Through the courtesy of Axel A. Olsson and C. P. Nuttall, Paleontology Dept. [British Museum (Nat. His.)], in 1964, the types of Thomas Say (1824b) of the species described from the Miocene of Maryland were pointed out to be in the British Museum (Nat. Hist.). See Newton (1902). The specimens had been collected by John Finch, the species described by Say in 1824, and the collection sold by Finch to the British Museum (Natural History) in 1834. Included among the species described by Say was "*Ostrea compressirostra*." All of the species except *O. compressirostra* have been known to be Miocene forms. Say did not designate the age of the species. *O. compressirostra* from 1842 (Tuomey) to the present has been regarded as an Eocene species characteristic of the Eocene of Maryland (Clark and Martin, 1901), Alabama, and Georgia (Harris, 1897b). Although common in the lower Eocene the so-called *O. compressirostra* does not occur in the Midway (Paleocene) of the southern states. We, therefore, doubted the Aquia (Paleocene) distribution of the species in Maryland as indicated by Clark and Martin (1901). In our preliminary work the dilemma was left with a statement that confirmation of the age would be held until the type of *O. compressirostra* Say could be found, examined, and the locality of occurrence could be established.

After examining and photographing Say's types in the British Museum (Natural History) in 1964, Olsson determined the type of *O. compressirostra* Say as *O. disparilis* Conrad, 1840 (per. com., June 12, 1964), the Miocene species. Conrad in Morton, 1834, listed the species as Miocene but later from 1865 on included the species in the Eocene.

In the Finch collection [BM(NH)] of *O. compressirostra* there is a second specimen which was identified by Olsson as Eocene. C. P. Nuttall (per. com., July 1, 1964) of the BM (NH) does not believe that the second specimen in their collection is the one referred to by Say as a specimen presented to the Academy of Natural Sciences at Philadelphia, because it is the wrong valve and the measurements do not tally.

Because the type of *O. compressirostra* Say, 1824, is Miocene and because of the problem of the age of the so-called "*O. compressirostra*", it seems best to retain *O. compressirostra* Say for the Miocene species be-

cause there is a name which may be utilized for the Eocene species. The name *Ostrea sinuosa* was given by Rogers and Rogers in 1837, for the Eocene species from Virginia. This name has heretofore been placed in the synonymy of the so-called "*O. compressirostra* Say". We suggest and use herein *Ostrea sinuosa* Rogers and Rogers, 1837, type locality, Prince George County, Evergreen, James River, lower Eocene, for the lower Eocene species of Virginia, Maryland, and the southern states. Rogers and Rogers in 1837 (pp. 366, 367) recognized *O. compressirostra* Say as the Miocene species as they so stated. They described and named the Eocene form *Ostrea sinuosa* with the remarks (p. 340), "This very beautiful fossil oyster will be seen to differ from the *O. compressirostra* [p. 366 placed *O. compressirostra* in Miocene [sic]] in several essential particulars, . . .". It is clear that Rogers and Rogers knew the distinction between the Eocene and Miocene oysters which had been confused as *O. compressirostra*. Rogers and Rogers gave excellent figures of *O. sinuosa* and a definite type locality, of which Say's description of *O. compressirostra* does not have except "Maryland." Rogers and Rogers types have not been found.

Heilprin (1884b, p. 15 footnote) called attention to Rogers and Rogers crediting *O. compressirostra* to the Miocene and the resemblance to *O. disparilis*. Heilprin noted in the Academy the presence of the specimen mentioned by Say from near "Alexandria, right bank of Potomac."

Some later authors have identified *O. compressirostra* as a Miocene species (Dall, 1903 in part; Richards, 1950; DuBar and Solliday, 1961) so that not only does the literature include the confused Eocene age but does contain the true Miocene determinations.

Our recommendation as a result of an analysis of the complicated history of *O. compressirostra* is: (1) *Ostrea compressirostra* Say, 1824, stand for the Miocene species which its type represents, and the specimen Reg. No. L13204 in the British Museum (Nat. Hist.) be selected as the lectotype. The name *O. disparilis* Conrad 1840, or other later specific names which are equivalent will fall in the synonymy of *O. compressirostra* Say; (2) *O. sinuosa* Rogers and Rogers, 1837, be used for the Eocene species which has commonly been called "*O. compressirostra* Say."

The specimen which Say stated in his original description that had been given by Mr. Z. Collins to the Academy of Natural Sciences at Philadelphia, from "west branch of the Potomac, fifteen miles below Alexandria" is in the Academy of Natural Sciences (per. com. H. G. Richards, July 27, 1964). It is the specimen presented by Mr. Collins and is from below Alexandria, Va. "according to a label pasted on the shell." Because the name *O. sinuosa* Rogers and Rogers is available for the Eocene *Ostrea*, it is not necessary to give a new name to that specimen of Say.

The authors are indebted to C. P. Nuttall and Axel A. Olsson for information regarding Say's types in the BM(NH) and opinions regarding the same.

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—VA.: Prince George Co., Evergreen, James R. (type).

MD.: See Clark and Martin (1901) except for Aquia formation localities. ALA. and GA.: See Harris, 1897b, p. 38

*Type*.—Presumably lost. Possibly MCZ

*Ostrea (Cubiotrea) smithvillensis* Harris

See *Cubiotostrea* ( ) *smithvillensis* (Harris)

"*Ostrea (Gryphocostrea) subversa* Conrad" *nomen nudum*

*Ostrea (Gryphocostrea) subversa* Conrad, 1865a, p. 15, p. 190+ as

*Gryphaeostrea* [corrected spelling] *nomen nudum*. Identified as probably "*Ostrea eversa* [Melleville] Deshayes". [Thanetian, France]

*Gryphostrea* "*eversa* (Deshayes)", Conrad, 1866a, p. 3 Md. & Miss.

*Ostrea eversa* "Mellville" sp., Heilprin, 1884c, p. 310 in part, not pl. 64, figs. 5-8 copy Deshayes

"*Ostrea subeversa* Conrad", Clark, 1896, p. 93 not described. Species not found by Clark.

*Ostrea* (*Gryphaeostrea*) *subeversa* Conrad, Dall, 1898b, p. 672 in part. Description of subgenus. Not Kellum, 1926, p. 18; Stenzel, 1947, p. 175 *nomen nudum*.

Discussion of nomenclature of *Gryphaeostrea* Conrad, 1865a, and type species "*O. eversa* [Melleville, 1843, p. 87] Deshayes" 1864 [1861], pp. 99, 100

*O. subeversa* was never described or figured by Conrad so that it remains a *nomen nudum* as of Conrad. If the name needs to have status it could possibly date from Dall who gave a description of *Gryphaeostrea* Conrad using "*O. subeversa* Conrad=*O. eversa* (Mellv. ?) Conrad + ? *O. vomer* Morton" as type species. But Dall could not have used the characters of "*O. subeversa*" for the generic description because as yet no one knows what *O. subeversa* is. The name best be eliminated from the literature. *Gryphaea eversa* (not *Ostrea*) was described by Melleville, 1843, p. 87

Range.—Eocene.

Locality.—MD.: "U. Marlboro", Conrad, 1865a

Types.—Specimens (2), No. 30714 ANSP Moore, 1862, p. 99

*Ostrea* (*Gryphaeostrea*) *subeversa* Conrad, Dall, 1898b in part

See *Gryphaeostrea vomer* (Morton)

*Ostrea sylvaerupis* Harris

See *Gigantostrea sylvaerupis* (Harris)

*Ostrea tasex* Gardner

See *Ostrea multilirata* Conrad

## ***Ostrea tecticosta* Gabb**

## **Ostreidae**

*Ostrea tecticosta* Gabb, 1860d, p. 403, pl. 68, figs. 47, 48; Whitfield, 1885, p. 33, pl. 3, figs. 1, 2 type; Weller, 1907, p. 443, pl. 43, figs. 17, 18; figs. 19 type; Richards, 1958, p. 107, pl. 16, figs. 13, 14 (type) see for synonymy, description, and localities

Range.—Upper Cretaceous (type). Paleocene. Hornerstown fm.

Localities.—N.J.: (type); Monmouth Co., Marlboro (Weller);

Gloucester Co., Harrisonville (Richards). Tenn. (type)

Types.—Syntypes (N.J.), No. 18761; (Tenn.), No. 18808 ANSP

*Ostrea thirsae* (Gabb)

See *Odontogryphaea thirsae* (Gabb)

*Ostrea trigonalis* Conrad

See *Gigantostrea trigonalis* (Conrad)

*Ostrea trigonalis sylvaerupis* Harris

See *Gigantostrea sylvaerupis* (Harris)

*Ostrea tumidula* Aldrich, 1894b

See *O. crenulimarginata* Gabb [*vide* Harris, 1896, p. 45]

*Ostrea tuomeyi* Conrad, 1865g

See *Gigantostrea trigonalis* (Conrad)

*Ostrea vicksburgensis* Conrad

See *Alectryonia vicksburgensis* (Conrad) variations

*Ostrea vicksburgensis ludoviciana* Harris

See *Alectryonia ludoviciana* (Harris)

*Ostrea vicksburgensis mortoni* Gabb

See *Alectryonia vicksburgensis mortoni* (Gabb)

*Ostrea (Gryphaeostrea) vomer* (Morton)

See *Gryphaeostrea vomer* (Morton)

*Ostrea (Gryphaeostrea) vomer* (Morton), Clark and Martin

See *Ostrea* spp.

#### **Ostrea sp.**

#### **Ostreidae**

*Gryphaea vesicularis* (Lamarck), Clark and Martin, 1901, p. 193, pl. 50, figs. 6, 6a. Not *Ostrea vesicularis* Lamarck, 1806b, p. 160

*Range*.—? Paleocene. Aquia fm. or derived from Cretaceous

*Locality*.—MD.: Charles Co., Clifton Beach

*Type*.—Figured specimen, USNM

#### **Ostrea sp.**

#### **Ostreidae**

*Gryphaea vesicularis* Lamarck, Whitfield, 1885, p. 224, pl. 29, figs. 7, 8; Whitfield, 1899, p. 158. Not *O. vesicularis* Lamarck, 1806b, p. 160

*Range*.—Middle Eocene. Shark R. ml., upper Claiborne gr.

*Locality*.—N.J.: Monmouth Co., Shark R.

*Type*.—Figured specimen, No. 7832, State Mus. Trenton, N.J.

#### **Ostrea sp.**

#### **Ostreidae**

*Ostrea compressirostra* Say, Clark, 1895, p. 5 in part; Clark, 1896, p. 86 in part, pl. 37; pl. 38, figs. 1a, b, 2a-c, pl. 39, fig. 1; Dall, 1898b, p. 679 in part; Clark and Martin, 1901, p. 190 in part, pls. 45, 46, 47; Vokes, 1961, p. 49, pl. 10, fig. 13 copy Clark, 1896, pl. 38, fig. 1a. Not *O. compressirostra* Say, 1824b

*Range*.—Paleocene. Aquia fm.

*Localities*.—MD.: See Clark and Martin, 1901

*Types*.—Figured specimens probably USNM

#### **Ostrea sp.**

#### **Ostreidae**

*Ostrea cretacea* Morton, Aldrich, 1886, p. 43; Aldrich, 1895b, p. 16 not pl. 5, fig. 10

*Range*.—Upper Eocene. Jackson gr.

*Locality*.—ALA.: Clarke Co., "The Rocks"

*Type*.—Unfigured specimen, unknown



**Ostrea sp.****Ostreidae**

*Ostrea cretacea* Morton, Aldrich, 1895b, p. 16 in part, pl. 5, fig. 10

*Range*.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R. [label with specimen]

*Type*.—Figured specimen, No. 638956 USNM

**Ostrea sp.****Ostreidae**

*Ostrea compressirostra* Say, Clark, 1895, p. 5; Clark, 1896, p. 86 in part, pl. 39, figs. 2a, 2b

*Ostrea (Gryphaeostrea) vomer* (Morton), Clark and Martin, 1901, p. 193, pl. 50, figs. 2, 3

*Range*.—Paleocene. Aquia fm.

*Locality*.—MD. or VA.

*Type*.—Figured specimen, USNM

**Ostrea sp.****Ostreidae**

*Ostrea "podagrina"* Dall, Harris, 1951, p. 7 in part, pl. 1, figs. 3, 4 probably not *O. podagrina* Dall, 1896b which see; Brann and Kent, 1960, p. 637

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—FLA.: Marion Co., Ocala Lime Rock Corp., E. of Kendrick

*Type*.—Figured specimen, No. 24436, PRI

**Ostrea sp.****Ostreidae**

*Ostrea sp.* Barry, 1942+, p. 55

*Range*.—Paleocene. "Logansport fm.", (name preoccupied) middle Midway gr.

*Locality*.—LA.: Natchitoches Par., rd. cut in NW.  $\frac{1}{4}$  SE.  $\frac{1}{4}$  sec. 33, T. 10 N., R. 10 W. along dirt rd. leading west from Louisiana Highway 404

*Type*.—Unfigured specimen, No. 5090 LSU Pal. Mus.

**Ostrea sp.****Ostreidae**

*Ostrea sp.*, Barry, 1942+, p. 52, pl. 3, figs. 4, 5

*Range*.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.

*Types*.—Figured specimens, presumably LSU Pal. Mus.

**Ostrea sp.****Ostreidae**

*Ostrea sp.* Clark, 1895, p. 6; Clark, 1896, p. 88, pl. 38, fig. 3

*Ostrea (Gryphaeostrea) vomer* (Morton), Clark and Martin, 1901, p. 193 in part, pl. 50, fig. 5 same as Clark, 1896, pl. 38, fig. 3

*Range*.—Paleocene. Aquia fm.

*Locality*.—MD.: Charles Co., Clifton Beach

*Type*.—Figured specimen, USNM



**Ostrea sp.****Ostreidae**

*Ostrea* sp. Clark, 1895, p. 6; Clark, 1896, p. 88, pl. 39, figs. 3a-c  
*Ostrea* (*Gryphacostrea*) *vomer* (Morton), Clark and Martin, 1901, p. 193 in part, pl. 50, figs. 1-1b same as Clark, 1896, pl. 39, figs. 3a-c

*Range*.—Paleocene. Aquia fm.

*Locality*.—MD.: Charles Co., Glymont

*Type*.—Figured specimen, USNM

**Ostrea sp.****Ostreidae**

*Ostrea* sp. Gardner, 1935, p. 138

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: Caldwell Co., 5½ mi. N. Lockhart, (USGS 11707)

*Type*.—Unfigured specimen not found USNM, 1962

**Ostrea sp.****Ostreidae**

*Ostrea* sp. Gardner, 1935, p. 143

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: Medina Co., USGS Sta. 6281, Hondo Creek, left bank, ¼ mi. above road crossing due E. of Elstone; USGS Sta. 6280, loose boulder, bed of Hondo Creek, ⅛ mi. below road crossing due E. of Elstone

*Types*.—Unfigured specimens probably USNM

**Ostrea spp.****Ostreidae**

*Ostrea* spp. Richards, 1948, p. 2, pl. 2, figs. 16, 17

*Range*.—Middle Eocene. (? Claiborne)

*Locality*.—N.C.: Johnston Co., about 3 mi. W. of Clayton

*Types*.—Figured specimens, probably ANSP

**Ostrea sp.****Ostreidae**

*Ostrea* sp. Richards and Palmer, 1953, p. 45, pl. 9, fig. 6

*Range*.—Upper Eocene. Inglis fm., lower Ocala gr.

*Locality*.—FLA.: Levy Co., road metal pit 2.9 mi. S. of N. limits of Gulf Hammock just SW. of State Road 55 in SW. ¼ sec. 34, T. 14 S., R. 16 E.

*Type*.—Figured specimen, No. I-7595 Fla. Geol. Sur.

**Ostrea sp.****Ostreidae**

*Ostrea* sp. Weller, 1907, [no p.] pl. 42, fig. 14

*Range*.—Lower Eocene. Vincentown fm.

*Locality*.—N.J.: Monmouth Co., near Deal

*Type*.—Figured specimen unknown

**Ostrenomia carolinensis Conrad****Plicatulidae**

*Ostrenomia carolinensis* Conrad, 1872b, p. 216, pl. 7, fig. 3 [3 specimens figured interior and exterior] "Eocene of North Carolina"; Tryon, 1884b, p. 295, pl. 133, figs. 29, 30; Dall, 1898b, pp. 761, 764=  
*Plicatula*

*Range*.—Eocene

*Locality*.—"N.C." (type)

*Type*.—Not found ANSP by Moore, 1962

**Pachecoa (Pachecoa) adamsi (Palmer)****Noetiidae**

*Trinacria adamsi* Palmer in Price and Palmer, 1928, p. 25, pl. 7, figs. 1, 2, 5; Brann and Kent, 1960, p. 875

*Pachecoa (Pachecoa) adamsi* (Palmer), Stenzel, Krause, and Twining, 1957, p. 68, pl. 6, figs. 10, 11

*Range*.—Middle Eocene. Queen City fm. (type), lower Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, mouth of Gazley Creek, Colorado R., Smithville (Bur. Ec. Geol. loc. No. 11-T-38) (type)

*Types*.—Holotype, No. 349; paratypes, Nos. 347, 348 PRI

**Pachecoa (Pachecoa) cainei Harris****Noetiidae**

*Trinacria (Pachecoa) cainei* Harris, 1919, p. 46, pl. 20, figs. 3, 3a; Brann and Kent, 1960, p. 875

*Pachecoa (Pachecoa) cainei* Harris, Stenzel, Krause, and Twining, 1957, p. 62, pl. 6, figs. 1-4

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: *Orangeburg Co.*, 3-6 miles WNW. of Orangeburg (type)

*Type*.—Holotype, No. 525 PRI

**Pachecoa (Pachecoa) catonis Stenzel and Twining****Noetiidae**

*Pachecoa (Pachecoa) catonis* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 68, pl. 6, figs. 12-14

*Range*.—Middle Eocene. Tallahatta fm. (type), lower Claiborne gr.

*Locality*.—ALA.: *Covington Co.*, Catons Bluff, left bank Conecuh R., sec. 14, T. 4 N., R. 14 E., 3 mi. WNW. of Andalusia (type)

*Types*.—Holotype, No. 20721 BEG; unfigured paratypes (6), No. 20722 BEG

**Pachecoa corvamnisi (Harris)****Noetiidae**

*Trinacria corvamnisi* Harris in Harris and Palmer, 1946, p. 53, pl. 13, figs. 3, 4; Brann and Kent, 1960, p. 875

*Pachecoa ? corvamnisi* (Harris), Stenzel, Krause, and Twining, 1957, p. 70

*Range*.—Upper Eocene. Upper Jackson gr. (type)

*Locality*.—ARK.: *St. Francis Co.*, Crow Creek, 2 mi. E. of Forrest City (type)

*Type*.—Holotype, No. 4218 PRI

**Pachecoa (Pachecoa) decisa (Conrad)****Noetiidae**

*Pectunculus decisus* Conrad, 1833c, p. 39 (Harris reprint 1893, p. 65); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389; Harris, 1895b, p. 14

*Limopsis decisus* (Conrad), Conrad, 1860, p. 297, pl. 47, fig. 16; Conrad, 1865a, p. 12 in part; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 192, pl. 23, fig. 28a copy Conrad (not pl. 25 as in text)

*Trinacria decisa* (Conrad), Cossmann, 1893, p. 16, pl. 1, figs. 17, 18; Harris, 1919, p. 41 in part, pl. 18, fig. 17 copy Conrad=Claiborne sand (not pl. 19, figs. 1, 2 var.; not pl. 18, figs. 18, 19)

*Trigonoarca [sic] decisa* (Conrad), Dall, 1898b, p. 606

*Halonanus decius* (Conrad), Stewart, 1930, p. 78; MacNeil, 1937, p. 457

*Trigonodesma decisa* (Conrad), Reinhart, 1935, p. 53

*Pachecoa* (*Pachecoa*) *decisa* (Conrad), Stenzel, Krause, and Twining, 1957, p. 69 includes "var." *abbreviata* Harris

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes (2), No. 30539 ANSP, Moore, 1962, p. 52

***Pachecoa* (*Pachecoa*) *decisa* (Conrad) "var."**

**Noetiidae**

*Trigonoarca* [sic] *decisa* (Conrad) var. Clark and Martin, 1901, p. 195, pl. 51, figs. 5, 5a

*Range*.—Lower Eocene. Nanjemoy fm.

*Locality*.—VA.: King George Co., Woodstock

*Type*.—Figured specimen, USNM

***Pachecoa* (*Pachecoa*) *decisa* (Conrad) "var."**

**Noetiidae**

Cf. *Limopsis declivis* (Conrad), de Gregorio, 1890, pl. 23, figs. 15-19 ? Gosport sd. possibly from base of bluff

*Trinacria decisa* (Conrad) var. Harris, 1919, p. 41 in part, pl. 19, figs. 1, 2; Brann and Kent, 1960, p. 876. Nos. 507, 508 add "var."

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Localities*.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R.; Lisbon Bluff, Alabama R. Cf. TEXAS: Robertson Co.,

Cedar Cr. Wheelock league; *Bastrop Co.*, Colorado R. at Smithville; Brazos R. 500 yds. below mouth of Little Brazos R. Cf.

LA.: Lincoln Par., Ruston well (Harris localities)

*Types*.—Figured specimens, Nos. 507, 508 PRI

***Pachecoa* (*Pachecoa*) *decisa abbreviata* (Harris)**

**Noetiidae**

*Trinacria decisa* "var." *abbreviata* Harris, 1919, p. 42, pl. 18, fig. 19; Brann and Kent, 1960, p. 876

*Pachecoa* (*Pachecoa*) *decisa* (Conrad), Stenzel, Krause, and Twining, 1957, p. 69 included in *P. decisa* (Conrad)

This form, as well as "*T. carolina* Harris, may prove to be a variation.

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: Orangeburg Co., 6 mi. WNW. of Orangeburg (type)

*Type*.—Holotype, No. 506 PRI

***Pachecoa* (*Pachecoa*) *declivis* (Conrad)**

**Noetiidae**

*Pectunculus declivis* Conrad, 1833c, p. 39 (Harris reprint 1893, p. 65); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389 includes *P. minor* Lea; Harris, 1895b, p. 15

*Limopsis declivis* (Conrad), Conrad, 1860, p. 297, pl. 47, fig. 13; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 191, pl. 23, figs. 21-23; fig. 24 copy Conrad (not figs. 15-19 see "*Trinacria decisa* Conrad", Harris, 1919, pl. 19, figs. 1, 2 base of Bluff, Claiborne)

*Trigonoarca* [sic] *declivis* (Conrad), Dall, 1898b, p. 606

*Trinacria declivis* (Conrad), Cossmann, 1893, p. 16; Harris, 1919, p. 42, pl. 19, figs. 3-6; Brann and Kent, 1960, p. 876; not *T. declivis* Renick and Stenzel, 1931, p. 104 [= *P. sabinica* (Harris)]

*Halonanus declivis* (Conrad), Stewart, 1930, p. 78; Gardner, 1945, p. 52, pl. 1, fig. 11? (Mexico)

*Pachecoa* (*Pachecoa*) *declivis* (Conrad), Stenzel, Krause, and Twining, 1957, p. 69

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type); Lisbon Bluff, Alabama R. (Harris). MISS.: *Clarke Co.*, Wautubbee (Harris)

*Type*.—Probable holotype, No. 30514 ANSP, Moore, 1962, p. 53

### ***Pachecoa* (*Stenzelia*) *ellipsis* (Lea)**

### **Noetiidae**

*Pectunculus ellipsis*, Lea, 1833, p. 78, pl. 3, fig. 56; H. C. Lea, 1849, p. 104; Harris, 1895b, p. 18

*Limopsis ellipsis* (Lea), Conrad, 1860, p. 207, pl. 47, fig. 9; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; Heilprin, 1884b, p. 88; de Gregorio, 1890, p. 192 in part, pl. 23, fig. 26 copy Lea; fig. 27 copy Conrad; Cossmann, 1893, p. 16

*Trigonoarca* [*sic*] *ellipsis* (Lea), Dall, 1898b, p. 606; Harris, 1919, p. 44, pl. 19, figs. 12-15; Brann and Kent, 1960, pp. 876, 877

*Halonanus ellipsis* (Lea), Stewart, 1930, p. 78

*Halonanus* (*Trinacriella*) *ellipsis* (Lea), MacNeil, 1937, p. 456

*Pachecoa* (*Stenzelia*) *ellipsis* (Lea), Stenzel, Krause, and Twining, 1957, p. 70

*Range*.—Middle Eocene. Cook Mt. fm. upper Claiborne gr.; McBean fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type); Lisbon Bluff, Alabama R. (Harris). LA.: *Lincoln Par.*, Ruston, well depth 1200 ft. (Harris). S. C.: *Orangeburg Co.*, 6 mi. WNW. Orangeburg (Harris)

*Type*.—Holotype, presumably No. 5357 ANSP

### ***Pachecoa* (*Pachecoa* ?) *ledoides* (Meyer)**

### **Noetiidae**

*Trigonocoelia ledoides* Meyer, 1886b, p. 79, pl. 1, fig. 20

*Limopsis* (*Trigonocoelia*) *ledoides* Meyer, de Gregorio, 1890, p. 191, pl. 23, fig. 25 copy Meyer

*Trinacria ledoides* (Meyer), Dall, 1898b, p. 604 *ledoides*; Cossmann, 1893, p. 15; Harris, 1919, p. 38, pl. 18, figs. 10, 10a; Brann and Kent, 1960, p. 877

*Pachecoa* (*Pachecoa* ?) *ledoides* (Meyer), Stenzel, Krause, and Twining, 1957, p. 70

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Claiborne, Alabama R. (type). S. C.: *Orangeburg Co.*, 3 and 6 mi. WNW. of Orangeburg (Harris)

*Type*.—Holotype, No. 638844 USNM

**Pachecoia lisbonensis** (Harris)**Noetiidae**

*Trinacria ellipsis lisbonensis* Harris, 1919, p. 45, pl. 19, figs. 16, 17; Brann and Kent, 1960, p. 877

*Pachecoia* ? (subgenus ?) *lisbonensis* Harris, Stenzel, Krause, and Twining, 1957, p. 69

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type)

*Types*.—Syntypes, No. 522 PRI (one syntype lost prior 1937)

**Pachecoia (Pachecoia) microcancellata** (Barry)**Noetiidae**

Not *Limopsis pulcher* (Gabb), Heilprin, 1891a, p. 403 as in Harris, 1897b, p. 48

*Trigonarca pulchra* (Gabb) var. Harris, 1897b, p. 48, pl. 8, figs. 2, 2a; Brann and Kent, 1960, pp. 871, 872

*Trinacria microcancellata* Barry, 1942+, p. 48, pl. 2, figs. 15-18; Wasem and Wilbert, 1943, p. 192

*Pachecoia (Pachecoia) microcancellata* (Barry), Stenzel, Krause, and Twining, 1957, p. 68

*Range*.—Lower Eocene. Sabinetown fm. (type), upper Wilcox [Sabine gr.]; Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—TEXAS: Sabine Co., bluff ¼ mi. downstream from Sabinetown Ferry Ldg., Sabine R. (type). Cf. ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R.; Clarke Co., Woods Bluff, Tombigbee R.

*Types*.—Syntypes, Nos. 5077, 5077-A LSU Pal. Mus.

**Pachecoia ovalis** (Harris)**Noetiidae**

*Trinacria ovalis* Harris, 1919, p. 43, pl. 19, figs. 9, 9a; Brann and Kent, 1960, p. 877

*Pachecoia (Subgenus ?) ovalis* (Harris), Stenzel, Krause, and Twining, 1957, p. 69

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 515 PRI

**Pachecoia ? (Pachecoia ?) pectuncularis** (Lea)**Noetiidae**

*Nucula pectuncularis* Lea, 1833, p. 81, pl. 3, fig. 60; H. C. Lea, 1849, p. 102; Tuomey, 1858, pp. 266, 274; Harris, 1895b, p. 14 (under *decisus*), p. 33; Schenck, 1934, p. 52

*Limopsis pectuncularis* (Lea), Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 191, pl. 23, fig. 20 copy Lea

*Arca pectuncularis* (Lea), Cossmann, 1893, p. 17

*Trinacria pectuncularis* (Lea), Dall, 1898b, pp. 577, 604, 607; Harris, 1919, p. 42, pl. 19, figs. 7, 7a, 8, 8a; Stewart, 1930, p. 82 possibly *Trinacria*; MacNeil, 1937, p. 456, fig. 1f; Brann and Kent, 1960, p. 877

*Pachecoia ? (Pachecoia ?) pectuncularis* (Lea), Stenzel, Krause, and Twining, 1957, p. 70

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5404? ANSP [*vide* Harris, 1919, p. 43]



**Pachecoa (Stenzelia) perplana** (Conrad) Pl. 3, figs. 9, 10 **Noetiidae**

*Pectunculus perplanus* Conrad, 1834, p. 134; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389 *perplanatus*; Conrad, 1860, p. 297, pl. 47, fig. 16; Harris, 1895b, p. 34

*Limopsis perplanus* (Conrad), Conrad, 1865a, p. 12 not in "Foss. Shells of Tert. p. 40" nor "J. A. N. Sciences, IV, p. 297, t. 47, f. 16" as stated by Conrad (fig. 16=*P. decisa* Conrad); Conrad, 1866a, p. 4; de Gregorio, 1890, p. 193 sp. dub.; Cossmann, 1893, p. 16, pl. 1, figs. 20, 21 as *perplana*

*Trigonoarca* [sic] *perplana* (Conrad), Dall, 1898b, p. 606

*Trinacria perplana* (Conrad), Harris, 1919, p. 43, pl. 19, figs. 10, 10a, 11; Brann and Kent, 1960, p. 877

*Halonanus perplanus* (Conrad), Stewart, 1930, p. 78

*Halonanus* (*Trinacriella*) *perplanus* (Conrad), MacNeil, 1937, p. 456, fig. 1h

*Pachecoa* (*Stenzelia*) *perplana* (Conrad), MacNeil, 1954, p. 217; Stenzel, Krause, and Twining, 1957, pp. 64, 70 [suggested might be same as *P. ellipsis* Lea]

The figures illustrated herein are the syntypes figured for the first time. Through the courtesy of H. G. Richards, ANSP, the types were made available for study and illustration. The present two syntypes are pasted on a card from which a third was fastened but is now unglued and lost. The left valve or smaller specimen is worn and only on the posterior faint microscopic radials show. Concentrics may be observed under a lens on the lower surface of the valve. The posterior dorsal surface of the right valve has a broken jagged edge which may suggest that the dorsal line is straighter than it was.

The left syntype has been compared with the specimen figured by Harris, 1919. They represent the same species.

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes (2), No. 30596 ANSP, Moore, 1962, p. 87

**Pachecoa (Pachecoa) pulchra** (Gabb)**Noetiidae**

*Noetia pulchra* Gabb, 1860d, p. 388, pl. 67, figs. 55, 55a. Not *Arca pulchra* J. de C. Sowerby, 1824, p. 115, pl. 473, fig. 3

*Limopsis decisa* (Conrad), Conrad, 1865a, p. 12 in part

*Limopsis pulcher* (Gabb), Heilprin, 1891a, p. 403

*Trinacria pulchra* (Gabb), Harris, 1919, p. 40 in part; not pl. 18, fig. 14 "var." nor pl. 18, figs. 11-13 (= *Pachecoa smithvillensis* Stenzel and Twining); Deussen, 1924, p. 67; Renick and Stenzel, 1931, p. 104

*Halonanus pulcher* (Gabb), Stewart, 1930, p. 78 (type species); MacNeil, 1937, p. 456, fig. 1i; Gardner, 1945, p. 51 in part as *pulchrus*

*Trigonodesma pulchra* (Gabb), Reinhart, 1935, p. 53

*Halonanus pulcher* (Gabb), Reinhart, 1943, p. 79 in part not pl. 2, figs 16-18=*P. sabinica* (Harris)

*Pachecoa* (*Pachecoa*) *pulchra* (Gabb), Stenzel, Krause, and Twining, 1957, p. 65, pl. 6, figs. 5, 6 lectotype designated

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: (Gabb) *Burleson Co.*, Stone City Bluff, Brazos R. (presumably type), *fide* Stenzel, Krause, and Twining, 1957, p. 11

*Types*.—No. 13261 ANSP contained 4 specimens. The specimen illustrated by Gabb, 1860d and designated by Stenzel, *et al.*, 1957 as lectotype is missing *fide* Stenzel, *et al.*

**Pachecoa (Pachecoa) pulchra** (Gabb) variations **Noetiidae**

*Trinacria pulchra* (Gabb), Harris, 1919, p. 40 in part, pl. 18, fig. 14 (only); Brann and Kent, 1960, p. 878, No. 502 only

*Range*.—Middle Eocene. Middle to upper Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R.; Devil's Eye; Little Brazos R. near Mosley's Ferry; well at College Station; *Robertson Co.*, Wheelock; Cedar Cr.; Campbell Cr., Gifford Headright; *Cherokee Co.*, Berryman place, Kimble head-right; *Lee Co.*, Orell's Crossing, Elm Cr.; *Gonzales Co.* 1 mi. S. from Nevilles; *Anderson Co.*, 3 mi. S. of Palestine; *Frio Co.*, Anderson's Ranch. LA.: *Lincoln Par.*, Chautauqua; *Ouachita Par.*, deep well Monroe, S.C.: *Orangeburg Co.*, Orangeburg

*Type*.—Figured specimen, No. 502 PRI

**Pachecoa (Pachecoa) sabinica** (Harris) **Noetiidae**

*Trinacria pulchra* var. *sabinica* Harris, 1919, p. 41, pl. 18, figs. 15, 16; Brann and Kent, 1960, p. 878

*Trinacria declivis* (Conrad) Renick and Stenzel, 1931, p. 104

*Halonautes pulcher* (Gabb), Reinhart, 1943, p. 79 in part, pl. 2, figs. 16-18

*Pachecoa (Pachecoa) sabinica* (Harris), Stenzel, Krause, and Twining, 1957, p. 66, pl. 6, figs. 17-20

*Pachecoa sabinica* (Harris), Brann and Kent, 1960, p. 646 lectotype designated

*Range*.—Middle Eocene. Stone City fm. (type), middle Claiborne gr.

*Localities*.—TEXAS: *Sabine Co.*, right bank Sabine R. [Bur. Ec. Geol. loc. No. 201-T-15] (type). See Stenzel, Krause, and Twining, 1957, p. 66 and Veatch, 1902, p. 129

*Types*.—Lectotype, No. 504; paralectotype, No. 503 PRI

**Pachecoa (Pachecoa) smithvillensis** Stenzel and Twining **Noetiidae**

*Trinacria pulchra* (Gabb), Harris, 1919, p. 40 in part, pl. 18, figs. 11-13 [not pl. 18, fig. 14—"var."]; Deussen, 1924, p. 67 [those listed under "N"]; Renick and Stenzel, 1931, p. 108 (not p. 104); Brann and Kent, 1960, pp. 877, 878

*Pachecoa (Pachecoa) smithvillensis* Stenzel and Twining, *in* Stenzel, Krause, and Twining, 1957, p. 67, pl. 6, figs. 7-9

*Pachecoa smithvillensis* Stenzel and Twining, Brann and Kent, 1960, p. 646

*Range*.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R., (type)

*Types*.—Holotype, No. 20706 BEG (figs. 8, 9); paratype, No. 20707 BEG (fig. 7), unfigured paratypes, Nos. 20733, 20795, 20796 BEG

*Pallium anatis* (Morton)

See *Flexopecten anatis* (Morton)

*Panopaea*See *Panopea**Panopaea* sp. Aldrich, 1886See *Panopea alabama* (Harris)*Panope*See *Panopea****Panopea alabama* (Harris)****Saxicavidae***Panopaea* sp. Aldrich, 1886, p. 58*Panopaea porrectoides* Aldrich "var.", Harris, 1897a, p. 478, pl. 22, fig. 4*Glycymeris alabama* Harris, 1897b, p. 69, pl. 13, fig. 16 same as 1897a, pl. 22, fig. 4*Panopea alabama* (Harris), Dall, 1898b, p. 828; Harris and Palmer, 1946, p. 119*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.*Localities*.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type).

GA.: Clay Co., Fort Gaines

*Type*.—Holotype, No. 6371 ANSP***Panopea bellsensis* Aldrich****Saxicavidae***Panopea bellsensis* Aldrich, 1921, p. 22, pl. 3, figs. 10, 11*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.*Locality*.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)*Type*.—Holotype, No. 43 GSATC***Panopea elliptica* Whitfield****Saxicavidae***Panopea elliptica* Whitfield, 1885, p. 219, pl. 28, figs. 24, 25; Whitfield, 1899, p. 162; Weller, 1907, p. 647, pl. 73, figs. 1, 2*Range*.—Lower Eocene. Manasquan fm. (type)*Localities*.—N.J.: Ocean Co., New Egypt (type); Medford*Type*.—Holotype, No. 7463, State Mus., Trenton, N.J.***Panopea elongata* Conrad****Saxicavidae***Panopaea elongata* Conrad, 1835b, p. 339, pl. 13, fig. 1; Conrad, 1846b, p. 215, pl. 1, fig. 2 (not pl. 2 as in text); H. C. Lea, 1849, p. 103;

Clark, 1895, p. 5; Clark, 1896, p. 75, pl. 19, figs. 1a-c

Not *Panopea elongata* Roemer, 1836, p. 126*Glycymeris elongata* (Conrad), Conrad, 1854, p. 29; Conrad, 1865a, p. 2; Conrad, 1866a, p. 8*Panopea elongata* Conrad, Dall, 1898b, p. 828; Clark and Martin, 1901, p. 162, pl. 31, figs. 1-5*Range*.—Paleocene. Aquia fm. (type)*Localities*.—MD.: Prince Georges Co., "Piscataway" (Conrad) (type); Fort Washington; Upper Marlboro; Tinkers Cr., 1 mi. N. of Piscataway; 1 mi. NE. of Piscataway; RR. cut near Seat Pleasant; Charles Co., Marshall Hall; 1 mi. SE. of Mason; Clifton Beach; Glymont; Ann Arundel Co., Winchester; Queen Annes Co., Rolphs Ldg., Chester R. VA.: Stafford Co., Aquia

Cr.; Potomac Cr.; *King George Co.*, Paspotansa Cr.; 2 mi. below Potomac Cr.  
*Type*.—Missing, ANSP, Moore, 1962, p. 58

***Panopea oblongata* Conrad**

**Saxicavidae**

*Panopaea oblongata* Conrad, 1848a, p. 290; Conrad, 1848b, p. 121, pl. 13, fig. 12; H. C. Lea, 1849, p. 103  
*Glycimeris elongata* Conrad, 1854, p. 29 duplicate *elongata* could be for *oblongata*  
*Panopea oblongata* Conrad, Dall, 1898b, p. 828; Brann and Kent, 1960, p. 649  
*Panope oblongata* Conrad, Harris and Palmer, 1946, p. 119, pl. 25, fig. 6 *Panopea*; Harris, 1951, p. 25 see *Panopea* sp.

*Range*.—Vicksburg Oligocene (type). Harris figured specimens from the Jackson Eocene which can be compared with the Vicksburg species.

*Localities*.—MISS.: *Warren Co.*, Vicksburg (type); cf. *Hinds Co.*, Town Creek, Jackson

*Type*.—Holotype not found *fide* Harris and Palmer, 1946, p. 119; probable holotype, No. 30643 ANSP, Moore, 1962, p. 81

***Panopea porrectoides* Aldrich**

**Saxicavidae**

*Panopea porrectoides* Aldrich, 1886, p. 37 *Panopaea*, pl. 4, fig. 3; Dall, 1898b, p. 828; Harris, 1919, p. 194, error in Harris, read *P. porrecta* for *P. porrectoides* in copy of Aldrich, pl. 59, fig. 1 copy Aldrich; Harris and Palmer, 1946, p. 119  
*Glycimeris porrectoides* (Aldrich), de Gregorio, 1890, p. 235, pl. 38, fig. 28 copy Aldrich; Cossmann, 1893, p. 6

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Washington Co.*, "Baker's Bluff [Gopher Hill] Ferr. Sand bed" (type) Aldrich [Holotype labelled St. Stephen's Bluff], Tombigbee R.

*Type*.—Holotype, No. 638795 USNM

*Panopea porrectoides* Aldrich "var."

See *Panopea alabama* (Harris)

***Panopea* sp.**

**Saxicavidae**

*Panope oblongata* Conrad, Harris, 1951, p. 25, pl. 13, figs. 6, 7?, 8 not Conrad, 1848a, p. 290

*Range*.—Upper Eocene. "Ocala 1s.", Ocala gr.

*Localities*.—GA.: *Houston Co.*, Georgia Lime Rock Quarry about 4 mi. from Perry; Clinchfield

*Types*.—Figured specimens, Nos. 24523-24525 PRI [not in Brann and Kent, 1960]

***Parapholas kneiskerni* Whitfield**

**Pholadidae**

*Parapholas Kneiskerni* Whitfield, 1885, p. 241, pl. 30, figs. 22-24; Dall, 1898b, p. 820; Whitfield, 1899, p. 162

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N.J.: *Monmouth Co.*, Shark R. (type)

*Type*.—Holotype, Trenton, N.J. Whitfield, 1899. Not found, 1962

**Cf. *Parmicorbula gibbosa* (Lea)****Corbulidae**

*Corbula oniscus* Conrad, Conrad, 1846c, p. 398 in part, pl. 4, fig. 3; H. C. Lea, 1949, p. 98 in part; Tuomey, 1858, pp. 265, 273 in part; Conrad, 1865a, p. 3 in part; Conrad, 1866a, p. 8 in part; not Heilprin, 1881, p. 364; Harris, 1895b, p. 31 in part; not Clark, 1895, p. 5; not Clark, 1896, p. 75; not Clark and Martin, 1901, p. 164, not pl. 32, figs. 7, 7a, 8, 8a, 8b

*Corbula gibbosa* Lea, 1833, p. 46, pl. 1, fig. 14; H. C. Lea, 1849, p. 98; Harris, 1895b, p. 20; Harris, 1919, p. 191, pl. 58, figs. 1-6; Brann and Kent, 1960, p. 263

*Corbula (Neaera) ignota* de Gregorio, 1890, p. 232, pl. 37, figs. 15-18 (left valves only)

*Corbula (Neaera) gibbosa* de Gregorio, 1890, p. 233 *C. churchisonii* [sic], pl. 36, fig. 26 copy Lea.; figs. 27-30 (right valves only); Coss-mann, 1893, p. 6

*Corbula (Aloidis) gibbosa* Lea, Dall, 1898b, p. 845 in part

"*Corbula*" *gibbosa* Lea, Vokes, 1944, p. 622, probably *Parmicorbula*

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes, No. 5063 (right valve); No. 5064 (left valve) ANSP; syntypes, *Corbula ignota* de Gregorio, No. 264448 de Gregorio Coll., PRI; see *Caestocorbula murchisonii* (Lea) for type information *C. oniscus* Conrad

***Pecchiolia dalliana* Harris****Verticordiidae**

*Pecchiolia dalliana* Harris in Van Winkle and Harris, 1919, p. 16, pl. 2, fig. 7; Kellum, 1926, p. 22; Brann and Kent, 1960, p. 654

*Range*.—Upper Eocene. Castle Hayne ls. (type), Jackson gr.

*Locality*.—N.C.: New Hanover Co., City [Rock] Quarry near Wilmington (type)

*Type*.—Holotype, No. 1406 PRI

*Pecten alabamensis* Aldrich

See *Amusium (Propeamusium) alabamense* (Aldrich)

*Pecten anatifipes* Morton

See *Flexopecten anatifipes* (Morton)

**"*Pecten anisopleura*" Conrad****Pectinidae**

*Pecten anisopleura* Conrad in Kerr, 1875, p. 18 Eocene; Heilprin, 1882a, p. 416; Dall, 1898b, pp. 740, 761

*Range*.—Eocene? Miocene?

*Locality*.—N.C.: Onslow Co., 40 mi. from Beaufort (found by Dr. Yarrow) [New River, Onslow Co. *vide* Dall, 1898b, p. 740]

*Type*.—Unknown

*Pecten (Chlamys) beverlyi* Tucker

See *Chlamys beverlyi* Tucker

*Pecten biddleana* Kellum

See *Chlamys biddleana* (Kellum)

*Pecten (clarkeanus? var.) burlesonensis* Harris

See *Chlamys burlesonensis* (Harris)



*Pecten calvatus* MortonSee *Eburneopecten calvatus* (Morton)*Pecten carolinensis* Conrad in Kerr, 1875See *Chlamys membranosa* (Morton) [*vide* Dall, 1898b, p. 736]*Pecten cawcawensis* HarrisSee *Chlamys cawcawensis* (Harris)*Pecten centrotus* DallSee *Chlamys perplana centrota* (Dall)*Pecten* (*Aequipecten*) (*perplanus* var.?) *centrotus* DallSee *Chlamys perplana centrota* (Dall)*Pecten choctavensis* AldrichSee *Chlamys choctavensis* (Aldrich)*Pecten claibornensis* Conrad *nomen nudum*See *Eburneopecten scintillatus* (Conrad)*Pecten clarceanus* AldrichSee *Chlamys clarkeana* (Aldrich)*Pecten clarceanus* Aldrich, Dall in part; Harris, 1919 in partSee *Eburneopecten hamiltonensis* (Tucker)*Pecten* (*Chlamys*) *clarceanus* Aldrich, Dall, 1898b in partSee *Chlamys burlesonensis* (Harris)*Pecten clarceanus* Aldrich "var.", Harris, 1919 in partSee *Eburneopecten hamiltonensis* (Tucker)*Pecten* (*Chlamys*) *cocoanus* DallSee *Chlamys cocoana* Dall*Pecten cookei* KellumSee *Chlamys cookei* (Kellum)*Pecten* (*Chlamys*) *corvinus* HarrisSee *Chlamys corvina* Harris*Pecten cushmani* KellumSee *Chlamys cushmani* (Kellum)*Pecten dalli* ClarkSee *Eburneopecten dalli* (Clark)*Pecten* (*Chlamys*) *danvillensis* WeisbordSee *Chlamys danvillensis* Weisbord in Tucker-Rowland*Pecten Deshayesii* LeaSee *Chlamys deshavesii* (Lea)? *Pecten deshavesii* Lea, Aldrich, 1886, p. 57. Not Lea, 1833See *Chlamys greggi* Harris*Pecten Deshayesii* Lea, Heilprin, 1891a, p. 403; Kennedy, 1895See *Chlamys burlesonensis* (Harris)*Pecten deshavesii* Lea "var." HarrisSee *Chlamys deshavesii dennisoni* Tucker*Pecten Deshayesii tirmus* de GregorioSee *Chlamys deshavesii* (Lea)

**Pecten elixatus** Conrad**Pectinidae**

*Pecten elixatus* Conrad, 1845b, p. 174; Conrad, 1848b, p. 130, pl. 14, figs. 13, 14; H. C. Lea, 1849, p. 103; Heilprin, 1882a, p. 417; Dall, 1898b, p. 719 under *P. Poulsoni*; Harris in Van Winkle and Harris, 1919, p. 15, pl. 2, figs. 10, 11, "Con.?"; Kellum, 1926, p. 35; Richards, 1943, p. 519, pl. 84, figs. 9, 24, not 22 as in expl. of pl. and in text; Harris, 1951, p. 9, pl. 3, figs. 9, 10 type

*Pecten (Pecten) elixatus* (Conrad), Tucker-Rowland, 1936a, p. 475, pl. 4, figs. 1, 2 syntypes

*Pecten ? elixatus* Conrad, Brann and Kent, 1960, pp. 662, 663

*Range*.—Middle Eocene. Santee ls. (type), upper Claiborne gr. (fide Cooke and MacNeil, 1952, p. 20)

*Localities*.—S.C.: possibly *Berkeley Co.*, "near Santee Canal, in white friable limestone (upper Eocene)" (type). N.C.: *Jones Co.*, right bank of Trent R. below Pollocksville [sic]

*Types*.—Missing Moore, 1962, p. 60 [*elixatus sic*]; syntypes No. 12576 ANSP fide Tucker-Rowland, 1936a.

*Pecten (Pseudamusium) frontalis* Dall

See *Eburneopecten frontalis* (Dall)

See also *Eburneopecten dalli* (Clark)

*Pecten gilbertharrisii* Tucker [Rowland]

See *Chlamys beverlyi* Tucker [Rowland]

*Pecten (Chlamys) greggi* Harris

See *Chlamys greggi* Harris

*Pecten (Chlamys) indecisis* Dall

See *Chlamys indecisa* Dall

*Pecten johnsoni* Clark

See *Chlamys johnsoni* (Clark)

*Pecten Kneiskerni* Conrad

See *Chlamys kneiskerni* (Conrad)

*Pecten Lyelli* Lea

See *Chlamys deshayesi* (Lea)

*Pecten membranosus* Morton

See *Chlamys membranosa* (Morton)

*Pecten minutus* Lea, 1833, p. 88

See *Chlamys deshayesi* (Lea)

*Pecten nuperus* Conrad

See *Chlamys nupera* (Conrad)

*Pecten (Amusium) ocalanus* Dall

See *Amusium ocalanum* Dall

*Pecten perplanus* Morton

See *Aequipecten perplanus* (Morton). Oligocene

*Pecten perplanus* Morton, Heilprin, 1882a; Dall, 1898b; Cooke, 1926a; Semmes, 1929; Shimer and Shrock, 1944. Not Morton, 1833a

See *Chlamys spillmani* (Gabb)

*Pecten perplanus* Morton "var.", Harris, 1951. Not Morton, 1833a

See *Aequipecten perplanus* (Morton) "var.", Harris, 1951

- Pecten (perplanus var.?) centrotus* Dall  
See *Aequipecten perplanus centrotus* (Dall)
- Pecten poulsoni* Morton. Oligocene  
This is Eocene of authors; confused with *P. perplanus* Morton, 1833a, 1834
- Pecten (Ianira) promeus* de Gregorio  
*Chlamys poulsoni* (Morton). Oligocene
- Pecten pulchricosta* Meyer and Aldrich  
See *Chlamys pulchricosta* (Meyer and Aldrich)
- Pecten Rigbyi* Whitfield  
See *Chlamys rigbyi* (Whitfield)
- Pecten rogersi* Clark  
See *Eburneopecten dalli* (Clark)
- Pecten (Eburneopecten) scintillatus* Conrad  
See *Eburneopecten scintillatus* Conrad
- Pecten scintillatus* Conrad; Dall, 1898b, p. 753 in part; Deussen, 1924, p. 67  
See *Eburneopecten* sp.
- Pecten (Pseudamusium) scintillatus* Conrad, Dall, 1898b  
See *Eburneopecten corneoides* (Harris)
- Pecten scintillatus* var. *corneoides* Harris  
See *Eburneopecten corneoides* (Harris)
- Pecten scintillatus corneoides* Harris, Harris, 1919 in part; Renick and Stenzel, 1931; Brann and Kent, 1960 in part  
See *Eburneopecten* sp.
- Pecten seabeensis* Richards  
See *Chlamys seabeensis* (Richards)
- Pecten spillmani* Gabb  
See *Chlamys spillmani* (Gabb)
- Pecten squamula* Lamarck  
See Cf. *Amusium (Propeamussium) squamulum* (Lamarck)
- Pecten subminutus* Aldrich  
See *Eburneopecten subminutus* (Aldrich)
- Pecten (Aequipecten) suwaneensis* Dall  
See *Aequipecten suwaneensis* Dall
- Pecten trentensis* Harris  
See *Chlamys trentensis* (Harris)
- Pecten (Chlamys) wautubbeanus* Dall  
See *Chlamys wahtubbeana* Dall
- Pecten wautubbeanus cainei* Harris  
See *Chlamys cainei* (Harris)
- Pecten (wahtubbeanus var. ?) Willcoxi* Dall  
See *Chlamys wahtubbeana willcoxi* (Dall)

*Pecten willcoxi cainei* Harris  
See *Chlamys cainei* (Harris)

*Pecten* sp.  
See *Chlamys* sp.

**Pecten** sp.

**Pectinidae**

*Pecten* sp. Richards, 1950, p. 15

*Range*.—Tentatively middle Eocene  
*Locality*.—N.C.: Johnston Co., 3 mi. W. of Clayton  
*Type*.—Specimen, probably ANSP

**Pecten** sp.

**Pectinidae**

*Pecten* sp. Weller, 1907, no p., pl. 49, fig. 10

*Range*.—Lower Eocene. Manasquan fm.  
*Locality*.—N.J.: Monmouth Co., Farmingdale  
*Type*.—Figured specimen unknown

*Pectunculus aviculoides* Conrad  
See *Limopsis aviculoides* (Conrad)

*Pectunculus Broderipii* Lea  
See *Glycymeris staminea* (Conrad)

*Pectunculus Broderipii* de Gregorio not Lea  
See *Limopsis aviculoides* (Conrad)

*Pectunculus Broderipii radiatus* de Gregorio  
See *Glycymeris idonea* (Conrad)

*Pectunculus circulus* Conrad, App. in Morton, 1834, p. 7; d'Orbigny, 1850, p. 389; Dall, 1898b, p. 608=*nomen nudum*

**"Pectunculus" corbuloides** Conrad

*Pectunculus corbuloides* Conrad, 1833c, p. 40 (Harris reprint, 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389; Harris, 1895b, p. 13; Stenzel, Krause, and Twining, 1957, p. 70 may be a *Pachecoa*

*Limopsis corbuloides* (Conrad), Conrad, 1860, p. 297; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 192; Dall, 1898b, p. 606 types mixed in ANSP with *P. declivis*; Harris, 1919, p. 39 types mixed ANSP

Indefinite species.

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr. [possibly Cook Mt. fm. *vide* Harris]

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type) [possibly base of bluff *vide* Harris, 1895b, p. 13]

*Types*.—Possible syntypes (2), No. 30515 ANSP Moore, 1962, p. 50. Mixed with *P. declivis* *vide* Harris, 1919, p. 39

*Pectunculus cuneus* Conrad  
See *Trinacria cuneus* (Conrad)

*Pectunculus decisis* (Conrad)  
See *Pachecoa* (*Pachecoa*) *decisa* (Conrad)

*Pectunculus declivis* (Conrad)See *Pachecoa* (*Pachecoa*) *declivis* (Conrad)*Pectunculus deltoideus* LeaSee *Glycymeris trigonella* (Conrad)*Pectunculus deltoidus* Lea Mut. *ignus* de GregorioSee *Glycymeris trigonella* (Conrad)*Pectunculus deltoidus* Lea Mut. *percuneatus* de GregorioSee *Glycymeris trigonella* (Conrad)*Pectunculus deltoidus* Lea Mut. *striatus* de GregorioSee *Glycymeris trigonella* (Conrad)*Pectunculus ellipsis* LeaSee *Pachecoa* (*Stenzelia*) *ellipsis* (Lea)*Pectunculus idoneus* ConradSee *Glycymeris idonea* (Conrad)*Pectunculus idoneus* Conrad, ClarkSee *Glycymeris idonea* (Conrad) subsp.*Pectunculus idoneus* Conrad, Harris, 1897b, p. 49 var.See *Glycymeris idonea* (Conrad) subsp.

"*Pectunculus lentiformis* Lea" in Tuomey, 1858, p. 267 is an error for *Pectunculus pulvinatus* Conrad, 1832a [not Lamarck, 1805, p. 216] re-named *P. lentiformis* by Conrad, 1835a, p. 36 [Harris reprint, 1893, p. 92]. Yorktown Miocene. Not Eocene as indicated in Tuomey.

*Pectunculus minor* LeaSee *Glycymeris trigonella minor* (Lea)*Pectunculus obliqua* LeaSee *Limopsis aviculoides* (Conrad)*Pectunculus perplanus* ConradSee *Pachecoa* (*Stenzelia*) *perplana* (Conrad)*Pectunculus perplanatus* (Conrad), d'OrbignySee *Pachecoa* (*Stenzelia*) *perplana* (Conrad)*Pectunculus stamineus* ConradSee *Glycymeris staminea* (Conrad)*Pectunculus stamineus* Conrad, Aldrich, 1886See *Glycymeris idonea* (Conrad) subsp.*Pectunculus trigonellus* ConradSee *Glycymeris trigonella* (Conrad)*Pectunculus* (n. sp.) Tuomey, 1858, p. 271See *Glycymeris idonea* (Conrad) subsp.*Pectunculus* sp. Clark, 1896, p. 84See *Glycymeris idonea* (Conrad) subsp.*Pectunculus* sp. Harris, 1896, p. 53See *Glycymeris* sp.



***Pelecypora hatchetigbeensis* (Aldrich)****Veneridae**

*Cytherea hatchetigbeensis* Aldrich, 1886, p. 39, pl. 4, fig. 1; de Gregorio, 1890, p. 218, 220, pl. 34, figs. 14a, b copy Aldrich as variety of *trigoniata*

*Meretrix hatchetigbeensis* (Aldrich), Cossmann, 1893, p. 10; Harris, 1897b, p. 63, pl. 12, figs. 11, 12; Brann and Kent, 1960, p. 543

*Dosiniopsis (Pelecypora) hatchetigbeensis* (Aldrich), Dall, 1902, p. 346; Dall, 1903a, p. 1226

*Pelecypora hatchetigbeensis* (Aldrich), Palmer, 1927/1929, p. 58, pl. 6, figs. 6, 8, 13, 14; Brann and Kent, 1960, p. 673

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: NE. Washington Co., Hatchetigbee Bluff, Tombigbee R. (type)

*Types*.—Syntypes, Nos. 638800, 638801 USNM

***Pelecypora trigoniata* (Lea)**

See *Katherinella trigoniata* (Lea)

***Periploma butlerianum* Aldrich****Periplomatidae**

*Periploma butleriana* Aldrich, 1895b, p. 19 in part, pl. 5, fig. 3; Harris, 1897b, p. 74, pl. 14, figs. 13, 13a copy Aldrich; Dall, 1903a, p. 1529; Barry, 1942+, p. 58

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Choctaw Co., Butler (type). Not Washington Co. "Baker's Bluff" [Baker Hill] as per Aldrich. See *Periploma* sp.

*Type*.—Holotype, No. 638968 USNM

*Periploma butleriana* Aldrich, 1895b in part

See *Periploma* sp.

***Periploma claibornense* (Lea)****Periplomatidae**

*Anatina claibornensis* Lea, 1833, p. 40, pl. 1, fig. 8; H. C. Lea, 1849, p. 96; Harris, 1895b, p. 10

*Periploma claibornensis* (Lea), Conrad, 1865a, p. 3; Conrad, 1866a, p. 8; deGregorio, 1890, p. 229, pl. 36, fig. 23 copy Lea; Cossmann, 1893, p. 7; Harris 1919, p. 180, pl. 55, fig. 1 copy Lea; Harris and Palmer, 1946, p. 109; Brann and Kent, 1960, p. 674, not lost, copy Lea holotype

*Periploma Collardi* Harris, Dall, 1903a, p. 1528 in part

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5023 ANSP [Harris Cat. 1895c]

***Periploma claibornense parvum* Harris****Periplomatidae**

*Periploma claibornensis* var. *parva* Meyer, 1885a, pp. 461, 467 not described, *nomen nudum*; Harris in Harris and Palmer, 1946, p. 109, pl. 23, figs. 16-18 copy Harris, 1897a

? *Periploma* sp. Harris, 1897a, p. 471, pl. 18, figs. 8, 8a, 8b

The above name by Meyer is a *nomen nudum* although Harris did not describe the species, he illustrated it well

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Jackson (type)

*Type*.—Holotype, ANSP; specimen, No. 638700 USNM labeled "typical"

#### **Periploma collardi** Harris

#### **Periplomatidae**

*Periploma collardi* Harris, 1895a, p. 52, pl. 3, fig. 4; Dall, 1903a, p. 1528 in part; Harris, 1919, p. 180, pl. 55, figs. 2 type, 3-5 variations; Brann and Kent, 1960, p. 674 variations

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—TEXAS: *Brazos Co.*, Dr. Collard's farm, Sparks Headright (type). LA.: *Winn Par.*, St. Maurice; mouth of Saline Bayou (Harris) variations. ALA.: *Monroe Co.*, base of Claiborne Bluff (Harris) variations

*Type*.—Holotype, No. 35672 BEG

*Periploma Collardi* Harris, Dall, 1903a in part

See *Periploma claibornensis* (Lea)

#### **Periploma collardi** Harris variation

#### **Periplomatidae**

*Periploma collardi* Harris "var.", Harris and Palmer, 1946, p. 110, pl. 23, fig. 22; Brann and Kent, 1960, p. 674 [fig. 22 not 33]

*Range*.—Upper Eocene. White Bluff fm., lower Jackson gr.

*Locality*.—ARK.: *Jefferson Co.*, White Bluff, Arkansas R.

*Type*.—Figured specimen, No. 4394 PRI

#### **Periploma collardi australinum** Harris

#### **Periplomatidae**

*Periploma collardi australina* Harris, 1919, p. 180, pl. 55, figs. 6-8; Brann and Kent, 1960, pp. 674, 675

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: *Orangeburg Co.*, Orangeburg District (type)

*Types*.—Syntypes, Nos. 1266, 1267 PRI

#### **Periploma collardi turgidum** Harris

#### **Periplomatidae**

*Periploma collardi* var. *turgida* Harris in Harris and Palmer, 1946, p. 110, pl. 23, figs. 19-21; Wilbert, 1953, p. 98; Brann and Kent, 1960, p. 675

*Range*.—Upper Eocene. Jackson gr. (type)

*Localities*.—ARK.: *St. Francis Co.*, Crow Cr. near Forrest City (type); *Jefferson Co.*, White Bluff, Arkansas R.

*Type*.—Holotype, No. 4393 PRI

#### **Periploma complicatum** Meyer

#### **Periplomatidae**

*Periploma complicata* Meyer, 1886b, p. 85, pl. 1, fig. 22; not Meyer, 1887a, p. 16; de Gregorio, 1890, p. 230, pl. 36, fig. 24 as *complanata* copy Meyer; Dall, 1903a, p. 1529 not Jacksonian; Harris and Palmer, 1946, p. 110, pl. 23, fig. 18a copy Meyer, probably a pathologic specimen of *P. claibornensis* Lea fide Harris

*Anafina* [sic] *complicata* (Meyer), Cossmann, 1893, p. 7

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638855 USNM

**Periploma howei** Barry**Periplomatidae**

*Periploma howei* Barry, 1942+, p. 58, pl. 6, figs. 6, 7; Wasem and Wilbert, 1943, p. 192

*Range*.—Lower Eocene. Pendleton Ferry fm. (type), middle Wilcox [Sabine] gr.

*Locality*.—TEXAS: *Sabine Co.*, Pendleton,  $\frac{1}{4}$  mi. upstream from bridge over Sabine R. on La. Highway 6 (type)

*Types*.—Holotype, No. 5124; paratype, No. 5125 LSU Pal. Mus.

*Periploma* sp. Harris, 1897a

See ? *Periploma claibornensis parva* Meyer

**Periploma** sp.**Periplomatidae**

*Periploma butleriana* Aldrich, 1895b, p. 19 in part, "Baker's Bluff"

*Range*.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

*Locality*.—ALA.: *Washington Co.*, Bakers Bluff, 1 mi. above St. Stephen's Bluff, Tombigbee R.

*Type*.—Unfigured specimen, USNM

**Periploma** (?) sp.**Periplomatidae**

*Periploma* (?) sp. Clark and Martin, 1901, p. 184

*Range*.—Lower Eocene. Nanjemoy fm.

*Locality*.—MD.: *Charles Co.*, E. of Port Tobacco. VA.: *King George Co.*, Woodstock

*Types*.—Unfigured specimens, No. 6430 ANSP and USNM

**Periploma** sp.**Periplomatidae**

*Periploma* sp. Barry, 1942+, p. 59, pl. 6, fig. 5

*Range*.—Lower Eocene. Sabinetown fm., upper Wilcox [Sabine] gr.

*Locality*.—TEXAS: *Sabine Co.*, Sabinetown, Sabine R.

*Type*.—Figured specimen, No. 5126 LSU Pal. Mus.

**Periploma** sp.**Periplomatidae**

*Periploma* sp. Gardner, 1935, p. 149

*Range*.—Paleocene. Wills Point fm., upper Midway gr.

*Locality*.—TEXAS: *Bastrop Co.*, Colorado R.  $\frac{1}{2}$  to  $\frac{3}{4}$  mi. above mouth of Dry Creek

*Type*.—Unfigured specimen probably USNM

**Periploma** sp.**Periplomatidae**

*Periploma* sp. Gardner, 1935, p. 149

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Limestone Co.*, USGS Sta. 11942,  $\frac{1}{4}$  mi. S. of Big Hill in roadside ditch. *Falls Co.*, USGS Sta. 11932,  $\frac{1}{4}$  mi. NW. Stranger School. *Milam Co.*, USGS Sta. 11916, Brazos R. 1 mi. below Falls Co. line, bed No. 1; USGS Sta. 11921, Brazos R., 1 mi. below Falls Co. line

*Types*.—Unfigured specimens probably USNM

**Periplomya elliptica** (Gabb)**Laternulidae***Anatina elliptica* Gabb, 1862a, p. 324*Periplomya elliptica* (Gabb), Whitfield, 1885, p. 177, pl. 23, figs. 14, 15; Johnson, 1905, p. 13; Weller, 1907, p. 522, pl. 57, figs. 8-11; Richards in Richards, *et al.*, 1958 p. 164, pl. 26, fig. 7 type. See for synonymy and discussion*Range*.—Upper Cretaceous (type). Lower Eocene, Manasquan fm.*Localities*.—N.J.: Gloucester Co., near Mullica Hill (type); Ocean Co., near New Egypt*Type*.—Holotype, No. 18767 ANSP**Periplomya truncata** Whitfield**Laternulidae***Periplomya truncata* Whitfield, 1885, p. 220, pl. 28, figs. 20, 21; Whitfield, 1899, p. 163; Weller, 1907, p. 522, pl. 57, fig. 10 type under *Periplomya elliptica* (Gabb); Richards, *et al.*, 1958, p. 164 under *P. elliptica* (Gabb)*Veleda nasuta* Whitfield, 1885, p. 217, pl. 28, fig. 23; Whitfield, 1899, p. 166; Weller, 1907, p. 522, pl. 57, fig. 11 under *Periplomya elliptica* (Gabb); Richards, *et al.*, 1958, p. 164 under *P. elliptica* (Gabb)*Range*.—Lower Eocene, Manasquan fm. (type)*Locality*.—N.J.: Ocean Co., near New Egypt (type)*Type*.—Holotype, *P. truncata*, No. 7466 State Mus. Trenton, N.J.**Perna cornelliana** HarrisSee *Isognomon cornelliana* (Harris)**Perna cretacea** (Conrad)See *Modiolus cretaceus* Conrad*Perna silicea* Tuomey, 1848, p. 154 *nomen nudum* (*fide* Harris, 1919, p. 201)**"Perna" texana** GabbPl. 1, fig. 7 **Mytilidae***Perna texana* Gabb, 1862c, p. 371; Conrad, 1865a, p. 10; Stenzel, Krause, and Twining, 1957, pp. 39, 40*Modiola texana* (Gabb), Harris, 1895a, p. 46 in part, not pl. 1, fig. 2*Modiolus (Brachydontes) texanus* (Gabb), Dall, 1898b, p. 796 in part*Modiolus texanus* (Gabb), Harris, 1919, p. 32 in part, not pl. 17, figs. 6, 7 [see *Brachydontes texanus* (Harris)]; not Trowbridge, 1932, pl. 43, fig. 3*Range*.—Cretaceous (Cenomanian). Woodbine gr., *fide* Stenzel in Stenzel, Krause, and Twining, 1957, pp. 39, 40*Locality*.—TEXAS: Johnson Co., "Caddo Peak" (Gabb) "near old Caddo P.O. on old road from Cleburne to Fort Worth" *fide* Stenzel, Krause, and Twining, 1957, pp. 39, 40*Type*.—Holotype, ANSP**Petricola claibornensis** Harris**Petricolidae***Petricola claibornensis* Harris, 1919, p. 153, pl. 48, figs. 1, 2*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)*Type*.—Missing USNM prior to 1962

**Petricola ? novaegyptica** Whitfield**Petricolidae**

*Petricola Nova-Aegyptica* Whitfield, 1885, p. 216, pl. 28, fig. 22

*Petricola nova-aegyptica* Whitfield, 1899, p. 163; Weller, 1907, p. 614, pl. 68, fig. 13 type

*Range*.—Lower Eocene, Manasquan fm. (type)

*Locality*.—N.J.: Ocean Co., near New Egypt (type)

*Type*.—Rutgers College (Whitfield, 1899). Lost (1963)

**Phacoides (Miltha?) albaripus** Gardner**Lucinidae**

*Phacoides (Miltha?) albaripa* Gardner, 1935, p. 173, pl. 16, figs. 1, 2

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Maverick Co.*, White Bluff, Rio Grande, 4½ mi. SW. of Windmill (Jacal) ranch house, USGS Sta. 6575 (type); *Bibora Cr.* just below Bibora tank, about 18 mi. SE. of Eagle Pass; *Uvalde Co.*, Frio R. just above waterhole opposite apiary below Englemanns ranch

*Type*.—Holotype, No. 370965 USNM

*Phacoides aquianus* (Clark)

See Cf. *Saxolucina aquiana* (Clark)

*Phacoides (Here) carinifera* (Conrad)

See *Linga carinifera* (Conrad)

*Phacoides (Miltha) claibornensis* (Conrad)

See *Saxolucina (Plastomiltha) claibornensis* (Conrad)

*Phacoides (Miltha) claytonia* (Harris)

See *Saxolucina claytonia* (Harris)

*Phacoides (Here) hamatus* Dall

See *Linga hamata* (Dall)

*Phacoides (Pseudomiltha ?) megameris* Dall

See *Pseudomiltha megameris* Dall

**Phacoides (Lucinisca) mesakta** Gardner**Lucinidae**

*Phacoides (Lucinisca) mesakta* Gardner, 1935, p. 174, pl. 16, figs. 3, 4

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.

*Locality*.—TEXAS: *Travis Co.*, clay from bluff at Webberville, USGA Sta. 5282 (type)

*Type*.—Holotype, No. 370966 USNM

*Phacoides (Miltha) ocalanus* Dall

See *Miltha ocalana* Dall

*Phacoides (Miltha) pandatus* (Conrad)

See *Eomiltha pandata* (Conrad)

*Phacoides perovatus* Dall (=Miocene)

See *Lucina* sp. Harris, 1951

*Phacoides rotundus* (Lea)

See *Epilucina rotunda* (Lea)



**Phacoides (Parvilucina) sabelli** Gardner**Lucinidae**

*Phacoides (Parvilucina) sabelli* Gardner, 1927, p. 372, figs. 10-13; Barry, 1942+, p. 65, pl. 8, fig. 3

*Range*.—Lower Eocene. Pendleton Ferry fm. (Barry), middle Wilcox [Sabine] gr.; Sabinetown fm. (type), upper Wilcox [Sabine] gr.

*Localities*.—TEXAS: *Sabine Co.*, 1½ mi. W. of Sabinetown, Sabine R. (type); ¼ mi. downstream from Sabinetown Ferry, Sabine R.; ¼ mi. upstream from bridge over Sabine R. on La. Highway 6

*Types*.—Syntypes, No. 369245 USNM

*Phacoides (Parvilucina) Smithi* (Meyer)

See *Linga (Cavilinga) pomilia smithi* (Meyer)

*Phacoides (Here) wacissanus* Dall (=Miocene)

See *Lucina* sp.

**Phacoides** sp.**Lucinidae**

*Phacoides* sp. Harbison, 1944, p. 5, pl. 2, fig. 4

*Range*.—Middle Eocene. Santee ls., upper Claiborne gr.

*Locality*.—S.C.: *Berkely Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner

*Type*.—Figured specimen, ANSP

**Phacoides (Lucinisca) spp.****Lucinidae**

*Phacoides (Lucinisca)* sp. Gardner, 1935, p. 175 three species

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Caldwell Co.*, 5½ mi. N. of Lockhart; *Falls Co.*, 6 mi. NW. of Kosse; *Travis Co.*, 4 mi. below Webberville, Colorado R.

*Types*.—Unfigured specimens not found USNM, 1962

*Phenacomya mauryi* (Harris)

See *Pholadomya mauryi* Harris

**Phenacomya petrosa** (Conrad)**Pholadidae**

*Pholas petrosa* Conrad, 1842b, p. 193, pl. 2, fig. 4; Conrad, 1846b, p. 213, pl. 1, fig. 1 (not pl. 2 as in text); H. C. Lea, 1849, p. 104; Conrad, 1865a, p. 2; Conrad, 1866a, p. 9; Dall, 1898b, p. 823

*Pholas* (?) *petrosa* Conrad, Clark, 1895, p. 5; Clark, 1896, p. 73, pl. 15, figs. 1a-c

*Phenacomya petrosa* (Conrad), Clark and Martin, 1901, p. 161, pl. 30, figs. 4, 4a, 4b

*Range*.—Paleocene. Aquia fm. (type)

*Localities*.—MD.: *Prince Georges Co.*, Piscataway (type); Fort Washington; *Charles Co.*, Clifton Beach. VA.: *Stafford Co.*, Aquia Cr.

*Type*.—Missing ANSP, Moore, 1962, p. 87

**Pholadomya claibornensis** Aldrich**Pholadomyidae**

*Pholadomya claibornensis* Aldrich, 1886, p. 38, pl. 4, fig. 5; de Gregorio, 1890, p. 234, pl. 38, fig. 27 copy Aldrich; Cossmann, 1893, p. 7; Dall, 1903a, p. 1531; Harris, 1919, p. 197 (in part) *Phladomya* [sic], pl. 59, figs. 6, copy type, 7, 8, 10; not fig. 9[=*P. harrisi* Gardner]; Kellum, 1926, p. 22; Stenzel, Krause, and Twining, 1957, p. 164; Brann and Kent, 1960, pp. 685, 686 base of Claiborne bluff

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr. [not Gosport sd. as in Brann and Kent]

*Localities*.—ALA.: *Monroe Co.*, base of Claiborne bluff, Alabama R. (type) [from type label]; Lisbon Bluff, Alabama R.

*Type*.—Holotype, No. 638798 USNM

*Pholadomya claibornensis* Aldrich, Harris, 1919 (in part)

See *Pholadomya harrisi* Gardner

*Pholadomya claibornensis harrisi* Gardner

See *Pholadomya harrisi* Gardner

**Pholadomya harrisi** Gardner**Pholadomyidae**

*Pholadomya claibornensis* Harris, 1919, p. 197 in part, pl. 59, fig. 9.

Not *Pholadomya claibornensis* Aldrich, 1886, p. 38

*Pholadomya (Claibornesis* [sic] subsp. ?) *harrisi* Gardner, 1927, p. 367, type not Cornell Univ. as stated

*Pholadomya harrisi* Gardner, Renick and Stenzel, 1931, p. 104 in part loc. 4 only; Stenzel, Krause, and Twining, 1957, p. 162, pl. 18, fig. 14; pl. 19, figs. 6, 7

*Pholadomya claibornensis harrisi* Gardner, Gardner, 1945, p. 86, pl. 6, figs. 1-3, 8, 9, 12, type not Cornell Univ. as stated

*Range*.—Middle Eocene. Weches fm. (type only), middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.; Laredo fm. (Gardner, 1945), upper Claiborne gr.

*Localities*.—TEXAS: *Cherokee Co.*, Lewis' house, 2 mi. E. of Alto (type); *Brazos Co.*, Little Brazos R.; *Leon Co.*, Bear Branch School; *Houston Co.*, creek bed, 2 mi. W. of Crockett; Hurricane Bayou; Alabama Ferry, Trinity R.; *Sabine Co.*, Tebo Bayou. LA.: *Winn Par.*, St. Maurice

*Type*.—Formerly No. 452 Texas State Mus. *fide* Harris, 1919; now lost *fide* Stenzel, *et al.*, 1957, p. 163

*Pholadomya harrisi* Gardner, Renick and Stenzel, 1931

See *Pholadomya harrisi* Gardner loc. 4 only

See *Pholadomya petropolitana* Stenzel and Twining loc. 1 only

**Pholadomya leonensis** Stenzel and Twining**Pholadomyidae**

*Pholadomya leonensis* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 164, pl. 18, fig. 13; pl. 19, figs. 4, 5

*Range*.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.

*Locality*.—TEXAS: *Leon Co.*, north ditch of old abandoned Concord-Centerville county road, 0.6 mi. SE. site of dismantled Robbins depot . . . (Bur. Ec. Geol. 145-T-1). See Stenzel, Krause, and Twining for complete description (type)

*Type*.—Holotype, No. 20550, BEG

**Pholadomya marylandica** Conrad**Pholadomyidae**

*Pholadomya marylandica* Conrad, 1842b, pp. 172, 193, pl. 1, fig. 3; Conrad, 1846b, p. 214, pl. 2, fig. 9 (not pl. 1 as in text); H. C. Lea, 1849, p. 104 (as *Marilandica*); Conrad, 1865a, pp. 3, 190+; Conrad, 1866a, p. 8; Clark, 1895, p. 5; Clark, 1896, p. 75, pl. 19, fig. 2; Clark and Martin, 1901, p. 184, pl. 43, fig. 3; Dall, 1903a, p. 1531; Stenzel, Krause, and Twining, 1957, p. 164

*Range*.—Paleocene. Aquia fm. (type)

*Localities*.—MD.: Charles Co., Clifton Beach; Prince Georges Co., Fort Washington; Piscataway (type, Conrad, 1842b). VA.: Stafford Co., Aquia Cr.

*Type*.—Possible holotype, No. 20384 ANSP, Moore, 1962, p. 74

**Pholadomya mauryi** Harris**Pholadomyidae**

*Pholadomya mauryi* Harris, 1896, p. 71, pl. 6, figs. 17, 17a; Stenzel, Krause, and Twining, 1957, p. 165; Brann and Kent, 1960, p. 686

*Phenacomya mauryi* (Harris), Dall, 1898b, p. 823 (footnote) [new genus]

*Range*.—Paleocene. Midway gr. (type)

*Localities*.—TENN.: Hardeman Co., Hannah's, 1¼ mi. N. of Crainesville (type); Huddleston's, 3 mi. W. of Crainesville

*Type*.—Holotype, No. 73 PRI

**Pholadomya petropolitana** Stenzel and Twining**Pholadomyidae**

*Pholadomya harrisi* Gardner, Renick and Stenzel, 1931, p. 104 in part; loc. 1 only

*Pholadomya petropolitana* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 163, pl. 18, fig. 15; pl. 19, figs. 1-3

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

*Types*.—Holotype, No. 20629 BEG, paratypes (5) BEG

**Pholas alatoidea** Aldrich**Pholadidae**

*Pholas Roperiana* Tuomey, 1858, pp. 267, 272 not Conrad; Aldrich, 1886, p. 37; Harris, 1919, p. 201 *nomen nudum*. Not Tuomey, 1848, p. 153 S.C. also *nomen nudum*

*Pholas alatoidea* Aldrich, 1886, p. 36 in part, pl. 4, figs. 9, 9c not fig. 9b=*P. aldrichi*; de Gregorio, 1890, p. 237, pl. 38, figs. 15, 16 copy Aldrich; not fig. 17=*P. aldrichi* de Gregorio; Harris, 1897b, p. 69, pl. 13, figs. 15, 15a; Brann and Kent, 1960, p. 686

*Barnea alatoidea* (Aldrich), Cossmann, 1893, p. 5; Dall, 1898b, p. 817 *Pholas alatoideus* Aldrich, Harris, 1899b, p. 304 in part, pl. 53, fig. 12 copy Harris, 1897b, not Texas locality

*Range*.—Lower Eocene. Tuscahoma fm. (type), middle Wilcox [Sabine] gr.

*Localities*.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type); Bells Ldg., Alabama R.

*Types*.—Syntypes, Nos. 638792 (fig. 9) USNM; fig. 9c missing prior to 1962

*Pholas alatoideus* Aldrich, Harris, 1899b, in part

See *Pholas* sp.

**Pholas aldrichi** de Gregorio**Pholadidae**

*Pholas alatoidea* Aldrich, 1886, p. 36 in part, pl. 4, fig. 9b only  
*Pholas alatoidea* Mut. *Aldrichi* de Gregorio, 1890, p. 237, pl. 38, fig. 17  
 copy Aldrich based on figure and not specimen

*Range*.—Lower Eocene. Tuscahoma fm. (type), middle Wilcox [Sabine] gr.

*Localities*.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type); Bells Ldg., Alabama R.

*Type*.—Holotype, fig. 9b, No. 643735 USNM

*Pholas petrosa* Conrad

See *Phenacomya petrosa* (Conrad)

*Pholas Roperiana* Tuomey, 1848, p. 153; Tuomey, 1858, pp. 267, 272  
 not Conrad as in text; Aldrich, 1886, p. 37; Harris, 1919, p. 201  
*nomen nudum*

See *Pholas alatoidea* Aldrich

**Pholas** sp.**Pholadidae**

*Pholas alatoideus* Aldrich, Harris, 1899b, p. 304 in part, not pl. 53, fig. 12 same fig. as Harris, 1897b=Gregg's Ldg., Ala.

*Range*.—Lower Eocene. Sabinetown fm., upper Wilcox [Sabine] gr.

*Locality*.—TEXAS: Sabine Co., Sabinetown, Sabine R.

*Type*.—Specimen lost

**Physoida clarkeana** (Aldrich)**Corbulidae**

*Corbula clarkeana* Aldrich, 1908b, p. 74, pl. 5, figs. 4, 5

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

*Type*.—Holotype, No. 639052 USNM

*Pinna cawcawensis* Harris

See *Atrina cawcawensis* (Harris)

*Pinna gardnerae* Barry

See *Atrina gardnerae* (Barry)

*Pinna gravis* Harris

See *Atrina gravis* (Harris)

**Pinna ? harnetti** Richards**Pinnidae**

*Pinna harnetti* Richards, 1948, p. 4, pl. 1, figs. 1, 2; Richards, 1950, pp. 14, 15, figs. 63a, b; Stenzel, Krause, and Twining, 1957, p. 80 cf. *Atrina*

*Range*.—Lower Eocene. Possibly Black Mingo fm. *fide* Richards, 1950, p. 14. Middle Eocene. (? Claiborne) (type)

*Locality*.—N.C.: Harnett Co., on the Sprunt or Highland Farm, 4 mi. NE. of Spout Springs (type)

*Types*.—Holotype, No. 18684; paratype, No. 18685 ANSP

*Pinna quadrata* Dall

See *Atrina quadrata* (Dall)

*Pinna rostriformis* Morton  
See *Atrina rostriformis* (Morton)

*Pinna* sp.  
See *Atrina* sp.

*Pinna* sp., Morton, 1834  
See *Atrina rostriformis* (Morton)

**Pitar ("Agriopoma") amichel** Gardner

**Veneridae**

*Meretrix trigoniata bastropensis* Harris, 1919, p. 148 in part, pl. 47, fig. 6 fide Gardner, 1945, p. 117

*Pitaria (Lamelliconcha) trigoniata bastropensis* (Harris), Palmer, 1927/1929, p. 42, pl. 8, fig. 21 copy Harris

*Callocardia (Agriopoma) amichel* Gardner, 1945, p. 116, pl. 9, figs. 26-29, 31 see for synonymy; Perrilliat Montoya, 1963, p. 12, pl. 2, fig. 3

This species is introduced because it is involved in the data originally given by Harris for *Meretrix trigonata bastropensis*, 1919. See Gardner, 1945.

The generic position is not determinable, but it is not *Callocardia*. *Callocardia* does not occur in the American Cenozoic.

*Range*.—Middle Eocene. Middle Laredo fm. (type), upper Claiborne gr.

*Localities*.—MEXICO: State of Tamaulipas 2890 meters S 3° E. from La Presa well, No. 1, Mier (type). TEXAS: *Webb and Zapata Cos.* fide Gardner, 1945

*Types*.—Holotypes, No. 496021; paratype, No. 559290 USNM

**Pitar angelinae** (Harris)

**Veneridae**

*Meretrix angelinae* Harris in Van Winkle and Harris, 1919, p. 17, pl. 2, figs. 12, 13; Brann and Kent, 1960, p. 543

*Pitaria (Pitaria) angelinae* (Harris), Palmer, 1927/1929, p. 17, pl. 4, figs. 16, 19 syntypes

*Range*.—Middle Eocene. Claiborne gr. (type). See Palmer, 1937, p. 485; Palmer in Harris and Palmer, 1947, p. 456

*Locality*.—TEXAS: *Angelina Co.*, along Angelina R., 2 mi. above Marion (type)

*Types*.—Syntypes, Nos. 1411, 1412 PRI

**Cf. Pitar biboraensis** (Gardner)

**Veneridae**

*Callocardia biboraensis* Gardner, 1935, p. 184, pl. 18, figs. 1, 2

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.

*Locality*.—TEXAS: *Maverick Co.*, Bibora tank on the Indio ranch, 18 mi. SE. of Eagle Pass (type)

*Type*.—Holotype, No. 370967 USNM

**Pitar (Pitar) cornelli** (Harris)

**Veneridae**

*Meretrix cornelli* Harris, 1895b, p. 49, pl. 1, fig. 5; Harris, 1919, p. 144, pl. 46, figs. 1, 2; Brann and Kent, 1960, p. 543

*Pitaria (Pitaria) cornelli* (Harris), Palmer, 1927/1929, p. 16, pl. 3, figs. 4-6, 8 type; Brann and Kent, 1960, p. 699

Not *Pitar* cf. *cornelli* (Harris), Harris, 1951, p. 22, pl. 11, figs. 4, 5; Brann and Kent, 1960, pp. 691, 692=*Pitar* sp.



—*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 45 PRI

*Pitar* cf. *cornelli* (Harris), Harris, 1951

See *Pitar* sp.

#### **Pitar eversus (Conrad)**

**Veneridae**

*Cytherea eversa* Conrad, 1845b, p. 174; Conrad, 1848b, p. 130, pl. 14, fig. 21; H. C. Lea, 1849, p. 99; Tuomey, 1858, p. 265 not p. 271; Clark, 1895, p. 5; Clark, 1896, p. 77, pl. 17, figs. 2a-d types; not Conrad in Wailes, 1854, p. 287 (reprint, 1939, p. 10)

*Meretrix eversa* (Conrad), Conrad, 1854, p. 30

*Dione eversa* (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

*Pitaria (Pitaria) eversa* (Conrad), Palmer, 1927/1929, p. 10, pl. 4, figs. 10, 13 paratype, 21; Brann and Kent, 1960, pp. 699, 700

*Range*.—Lower Eocene. Nanjemoy fm. (type).

*Localities*.—VA.: Hanover Co., Marlbourne, Pamukkey R. (type); King George Co., [just below] mouth of Potomac Cr.

*Type*.—Holotype, No. 4132 ANSP, Palmer 1927/29. Missing Moore, 1962, p. 59

#### **Pitar ? exiguus (Conrad)**

**Veneridae**

*Caryatis exigua* Conrad, 1871a, p. 201, pl. 11, fig. 3; Harris, 1919, p. 150, pl. 47, fig. 7 also under *Meretrix trigoniata bastropensis*, p. 148 with question

*Cytherea (Caryatis) exigua* Conrad, de Gregorio, 1890, p. 219, pl. 33, fig. 26 copy Conrad

*Meretrix exigua* (Conrad), Cossmann, 1893, p. 10

? *Pitaria exigua* [sic] (Conrad), Palmer, 1927/1929, p. 30, pl. 3, fig. 1 copy Conrad

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Presumably lost, not in ANSP *fide* Harris, 1919, p. 150; Moore, 1962, p. 60

#### **Pitar gazleyensis (Palmer)**

**Veneridae**

*Pitaria (Pitaria) gazleyensis* Palmer in Price and Palmer, 1928, p. 25, pl. 6, figs. 8, 11, 12; Brann and Kent, 1960, p. 700

*Range*.—Middle Eocene. Upper Queen City fm. (type), lower Claiborne gr.

*Locality*.—TEXAS: Bastrop Co., Smithville, mouth of Gazley Cr., Colorado R., (type)

*Type*.—Holotype, No. 345 PRI

#### **Cf. Pitar hawtofi (Gardner)**

**Veneridae**

*Callocardia hawtofi* Gardner, 1935, p. 182, pl. 17, figs. 1, 2

Generic position not determinable. Not *Callocardia*

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: Maverick Co., Comanche Cr. Crossing on W. road to Farias ranch; 18 mi. S. and E. of Eagle Pass; Bibora

tank about 18 mi. SE. of Eagle Pass; Bibora tank 7 mi. E. of new Indio ranch house; Indio Wells, about 29 mi. SE. of Eagle Pass (type); ? White Bluff,  $4\frac{1}{2}$  mi. W. of S. of Windmill (Jackal) ranch house on Rio Grande

*Type*.—Holotype, No. 370923 USNM

**Pitar juliae** (Palmer)

**Veneridae**

*Pitaria* (*Pitaria*) *juliae* Palmer in Price and Palmer, 1928, p. 26, pl. 6, figs. 2, 7; Brann and Kent, 1960, p. 701

*Range*.—Middle Eocene. Upper Queen City fm. (type), lower Claiborne gr.

*Locality*.—TEXAS: *Bastrop* Co., Smithville, mouth of Gazley Cr., Colorado R., (type)

*Type*.—Holotype, No. 340 PRI

**Cf. Pitar kempae** (Gardner)

**Veneridae**

*Callocardia kempae* Gardner, 1935, p. 185, pl. 17, fig. 4-6; pl. 18, fig. 3

Although it is difficult to give an exact generic venerid designation, the genus is not *Callocardia*

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.

*Localities*.—TEXAS: *Kaufman* Co., Water Hill, 5 mi. NE. of Kemp;  $2\frac{1}{2}$  mi. NE. of Kemp on public road (type)

*Types*.—Syntypes (3), Nos. 370968, 370969 USNM

**Pitar lenis** (Conrad)

**Veneridae**

*Cytherea lenis* Conrad, 1848b, p. 130, pl. 14, fig. 19; not Conrad in Wailes, 1854, p. 287 (reprint 1939, p. 10)

*Dione lenis* (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

*Meretrix lenis* (Conrad), Clark and Martin, 1901, p. 168, pl. 33, fig. 4

*Pitaria* (*Pitaria*) *lenis* (Conrad), Palmer, 1927/1929, p. 10, pl. 4, fig. 7 copy type

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—VA.: *Hanover* Co., Marlbourne (type); *King George* Co., Woodstock. MD.: *Prince Georges* Co., ravine N. of Thrift (?)

*Type*.—Holotype [?], No. 6384 ANSP; *fide* Clark and Martin, 1901, p. 168; missing Moore, 1962, p. 69

**Pitar (Lamelliconcha) macbeani** (Harris)

**Veneridae**

*Meretrix macbeani* Harris, 1919, p. 140, pl. 44, figs. 7, 8, not 9 as in text

*Pitaria* (*Lamelliconcha*) *macbeani* (Harris), Palmer, 1927/1929, p. 42, pl. 8, figs. 7, 9 (holotype)

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—GA.: *Burke* Co., McBean Cr. (type)

*Type*.—Holotype, No. 559283 USNM

**Pitar (Pitar) nuttali** (Conrad)

**Veneridae**

*Cytherea Nuttali* Conrad, 1834, p. 149; Conrad, 1835a, Harris reprint, 1893, pp. 8, 115, pl. 19, fig. 1 as *Nuttallii*; Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 380; Tuomey, 1858, p. 265, not pp. 269, 271; Heilprin, 1881, p. 370; de Gregorio, 1890, p. 219 in part, not pl. 34, fig. 23 copy Conrad, 1857; Harris,

1895b, p. 30. Not *Cytherca Nuttalli* Conrad, Conrad, 1857, p. 162, pl. 4, fig. 5—*Pitar trigoniata* var. *bastropensis* Harris; not Schuchert, et al., 1905, p. 213 not holotype *C. nuttalli*=*P. trigoniata* var. *bastropensis*

*Meretrix nuttalli* (Conrad), Conrad, 1854, p. 30 *Nuttallii*; Harris, 1919, p. 143, pl. 45, fig. 4 copy Conrad, (figs. 5-8 vars.); Brann and Kent, 1960, p. 544

*Dione Nuttalli* (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7 in part, Ala. only

*Pitaria (Pitaria) nuttalli* (Conrad), Palmer, 1927/1929, p. 14, pl. 3, figs. 2, 7, 13

Not *Pitar* sp. cf. *nuttalli* (Conrad), Harris, 1951, p. 22, pl. 11, figs. 1, 2; Brann and Kent, 1960, p. 692=*Pitar* sp.

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Probable holotype, No. 20171 ANSP, Moore, 1962, p. 80

#### **Pitar (Pitar) nuttalliopsis (Heilprin)**

**Veneridae**

*Cytherca Nuttalliopsis* Heilprin, 1881, p. 370, pl. 20, fig. 1; Aldrich, 1886, pp. 53, 57; de Gregorio, 1890, p. 220; not Aldrich, 1894b, p. 242

? *Cytherca minima* Lea, Aldrich, 1886, p. 53; Palmer, 1927/1929, p. 214. Not Lea, 1833, *fide* Harris, 1897b, p. 61

*Meretrix nuttalliopsis* (Heilprin), Harris, 1897b, p. 61, pl. 12, fig. 5; Harris, 1919, p. 141, pl. 44, figs. 9, 10; Brann and Kent, 1960, p. 545

*Pitaria (Pitaria) nuttalliopsis* (Heilprin), Palmer, 1927/1929, p. 12, pl. 2, figs. 1, 3, 5, 6, 11, 17; Brann and Kent, 1960, p. 702

*Pitar nuttalliopsis* (Heilprin), Stewart, 1930, p. 233

*Range*.—Lower Eocene. Tuscaloosa fm., middle Wilcox [Sabine] gr.; Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Knight's Branch (type); Thomasville; near mouth of Bashi Cr.; Woods Bluff, Tombigbee R.; Monroe Co., 4 mi. above Hamilton Bluff, Alabama R.; Greggs Ldg., Alabama R.; Bells Ldg., Alabama R.; Dale Co., Ozark

*Type*.—Holotype, ANSP

#### **Pitar (Pitar) nuttalliopsis fulvus (Harris)**

**Veneridae**

*Meretrix nuttalliopsis* (Heilprin) var. *fulva* Harris, 1897b, p. 62, pl. 12, figs. 8-10; Brann and Kent, 1960, p. 545 lectotype designated

*Pitaria (Pitaria) nuttalliopsis fulva* (Harris), Palmer, 1927/1929, p. 14, pl. 2, figs. 9, 13

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Wilcox Co., Yellow Bluff, Alabama R. (type). Ga.: Clay Co., Fort Gaines

*Types*.—Lectotype, No. 163; paralectotypes, Nos. 164, 165 PRI

#### **Pitar (Pitar) nuttalliopsis greggi (Harris)**

**Veneridae**

*Meretrix nuttalliopsis* var. (Heilprin), Harris, 1897a, p. 477, pl. 22, figs. 1-2 erroneously written *M. mortoniopsis*

*Meretrix nuttalliopsis* var. *greggi* Harris, 1897b, p. 62, pl. 13, figs. 1, 2

*Pitaria (Pitaria) nuttalliopsis greggi* (Harris), Palmer, 1927/1929, p. 13, pl. 2, figs. 2, 4, 10; Barry, 1942+, p. 68, pl. 9, fig. 2; Brann and Kent, 1960, p. 702

*Range*.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.; Tuscahoma fm. (type), middle Wilcox [Sabine] gr.; Pendleton Ferry fm., middle Wilcox [Sabine] gr.; Sabinetown fm., upper Wilcox [Sabine] gr. (type)

*Localities*.—ALA.: *Monroe Co.*, Gregg's Ldg., Alabama R.; Bells Ldg., Alabama R. (type); *Wilcox Co.*, Lower Peach Tree, Alabama R. LA.: For localities in *Natchitoches Par.* and *Sabine Par.* see Barry, 1942+, p. 68. TEXAS: *Sabine Co.*, Sabinetown, Sabine R.; Pendleton, Sabine R.

*Type*.—Holotype, No. 6294 ANSP

**Pitar (Pitar) nuttalliopsis heilprini (Palmer)**

**Veneridae**

*Pitaria (Pitaria) nuttalliopsis heilprini* Palmer, 1927/1929, p. 14, pl. 2, fig. 8; Brann and Kent, 1960, p. 702

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type)

*Type*.—Holotype, No. 1581 PRI

**Pitar (Pitar) ovatus (Rogers and Rogers)**

**Veneridae**

*Cytherea ovata* Rogers and Rogers, 1837, p. 340; 1839b, pl. 27, fig. 2 (reprint, 1884, p. 668, pl. 2, fig. 2); H. C. Lea, 1849, p. 99; Clark 1895, p. 5 in part; Clark, 1896, p. 76 in part not pl. 16=*P. (P.) pyga* (Conrad)

*Cytherea liciata* Conrad, 1845b, p. 174; Conrad, 1848b, p. 131, pl. 14, fig. 20; H. C. Lea, 1849, p. 99. Not Conrad in Wailes, 1854, p. 287 (reprint 1939, p. 10)

*Meretrix liciata* (Conrad), Conrad, 1854, p. 30

*Meretrix ovata* (Rogers), Conrad, 1854, p. 30; Richards, 1948, p. 3, pl. 2, figs. 8, 9; Richards, 1950, p. 15

*Dione ovata* (Rogers), Conrad; 1865a, p. 6; Conrad, 1866a, p. 7

*Dione liciata* (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

*Meretrix ovata ovata* (Rogers), Clark and Martin, 1901, p. 168, pl. 34, figs. 1, 1a

Not *Macrocallista* cf. *ovata* (Rogers), Dall, 1916, pp. 488, 500

*Pitaria (Pitaria) ovata* (Rogers), Palmer, 1927/1929, p. 11, pl. 4, figs. 3, 4, 20; Brann and Kent, 1960, p. 703

*Pitar ovata* (Rogers), Vokes, 1961, p. 50, pl. 10, figs. 3, 4

*Range*.—Lower Eocene. Nanjemoy fm. (type). Middle Eocene S.C. (Richards)

*Localities*.—VA.: *Prince George Co.*, Coggins Point, James R. (type); *Hanover Co.*, Newcastle, S. side Pamunkey R.; Marlborough; *King George Co.*, [just below] Potomac Cr. N.C.: *Johnson Co.*, about 3 mi. W. of Clayton. MD.: *Charles Co.*, E. and W. of Port Tobacco; Pope Creek; 1-2½ mi. above Popes Cr.; ½ mi. below Chapel Point; head of Nanjemoy Cr.; *Prince Georges Co.*, Upper Marlboro (deep cut near Chesapeake Beach R.R. Station); Upper Marlboro (SW. of town near forks of roads); 1 mi. SE. of Piscataway

*Type*.—Holotype probably MCZ. Holotype, *Cytherea liciata* Conrad missing ANSP, Moore, 1962, p. 69



**Pitar ovalis** (Whitfield)**Veneridae**

*Cyprina Morrisii* [Sowerby] in Conrad, 1865f, p. 73; Conrad, 1865h, p. 268 not *Cyprina morrisi* J. de C. Sowerby, 1841, p. 20, pl. 620, figs. 1-6

*Caryatis Delawareensis* Conrad, 1868, p. 731; Conrad, 1869b, p. 41, pl. 1, fig. 6 (not *Dione Delawareensis* Gabb, 1860a, p. 302 [not p. 312 as in Whitfield], pl. 48, fig. 19=*Crassatella*)

*Caryatis ovalis* Whitfield, 1885, p. 237, pl. 30, figs. 15, 16 included Conrad's preoccupied name; Whitfield, 1899, p. 155

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr. *Localities*.—N.J.: Monmouth Co., Shark R. (type), "Dr. Kneiskern's pits"; Squankum; near Farmingdale

*Types*.—*Caryatis ovalis* Whitfield, holotype, No. 7809 State Mus., Trenton, N.J.

**Pitar (Calpitar) petropolitanus** Stenzel and Krause**Veneridae**

*Meretrix texacola* Harris, 1895a, p. 50 in part, not pl. 2, figs. 5, 5a, 5b; Harris, 1919, p. 142 in part, pl. 45, fig. 1 only; Renick and Stenzel, 1931, p. 104, in part, loc. 1 only

*Pitaria (Pitaria) texacola* (Harris), Palmer, 1927/1929, p. 15 in part, not pl. 2, figs. 18, 19. See *Pitar* sp.; see also *P. texacola* (Harris)

*Pitar (Calpitar) petropolitanus* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 143, pl. 17, figs. 3-8

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr. (see Stenzel, Krause, and Twining, 1957, p. 145)

*Locality*.—TEXAS: Bureson Co., Stone City Bluff, Brazos R. (type)

*Types*.—Holotype, No. 20186 BEG, paratypes, No. 20771 BEG (figs. 3, 4), No. 20772 BEG (figs. 7, 8)

**Pitar poulsoni** (Conrad)**Veneridae**

*Cytherea Poulsoni* Conrad, 1833b, p. 36, not pl. 19, fig. 1 as in text, (Harris reprint, 1893, p. 58, pl. 20, fig. 7); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; Tuomey, 1858, p. 265; de Gregorio, 1890, p. 218, pl. 34, fig. 11 copy Conrad, figs. 12, 13; Harris, 1895b, p. 36

*Cytherea globosa* Lea, 1833, p. 65, pl. 2, fig. 40; Conrad, App. in Morton, 1834, p. 8=*C. poulsoni* Conrad; H. C. Lea, 1849, p. 99; Tuomey, 1858, pp. 265, 274; Harris, 1895b, p. 21 (= *C. poulsoni* Conrad)

*Venus Poulsoni* (Conrad), d'Orbigny, 1850, p. 380

*Dione Poulsoni* (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

*Meretrix poulsoni* (Conrad), Conrad, 1854, p. 30; Cossmann, 1893, p. 10; Harris, 1919, p. 144, pl. 46, figs. 3-5; Brann and Kent, 1960, p. 546

*Pitaria poulsoni* (Conrad), Palmer, 1927/1929, p. 15, pl. 3, figs. 9-12; Brann and Kent, 1960, p. 703

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes (9), No. 30518 ANSP, Moore, 1962, p. 88. ["Holotype" Harris, 1919, Palmer, 1927]



**Pitar pteleinus** (Gardner)**Veneridae**

*Callocardia pteleina* Gardner, 1935, p. 183, pl. 17, fig. 3; pl. 19, figs. 1-3

*Callocardia* (*Agriopoma* ?) sp. cf. *C. pteleina* Gardner, Gardner, 1945, p. 116, pl. 5, figs. 7, 12, 13

Not *Callocardia* or *Agriopoma*, hinge not accessible.

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Uvalde Co.*, USGS Sta. 11765 Schuddemagen ranch, 11 mi. S. of Sabinal (type). For further localities in Medina and Uvalde Co., see Gardner, 1935, p. 184. MEXICO: Gardner, 1945, p. 116 compared specimens to this species.

*Types*.—Holotype and paratype, No. 370921 USNM

**Pitar (Pitar) pyga** (Conrad)**Veneridae**

*Cytherea pyga* Conrad, 1845b, p. 174; Conrad, 1848b, p. 131, pl. 14, fig. 18; H. C. Lea, 1849, p. 99; not Conrad in Wailes, 1854, p. 287 (reprint, 1939, p. 10); not Hilgard in Hopkins, 1871, p. 11

*Meretrix pyga* (Conrad), Conrad, 1854, p. 30

*Dione pyga* (Conrad), Conrad, 1865a, p. 6

*Cytherea ovata* Rogers, Clark, 1895, p. 5 in part; Clark, 1896, p. 76 in part, pl. 16, figs. 1a-1f

*Meretrix ovata* var. *pyga* (Conrad), Clark and Martin, 1901, p. 169, pl. 34, figs. 2, 2a, 3, 3a, 4, 5; Harris, 1919, p. 141, pl. 44, fig. 11; Brann and Kent, 1960, p. 545

*Pitaria (Pitaria) pyga* (Conrad), Palmer, 1927/1929, p. 11, pl. 4, figs. 9, 11, 17; Brann and Kent, 1960, p. 704

*Pitar ovata pyga* (Conrad), Vokes, 1961, p. 191

*Range*.—Paleocene. Aquia fm. (type)

*Localities*.—VA.: *Stafford Co.*, Potomac R. (type); Potomac Cr.; Aquia Cr.; W. *Hanover Co.*, Ratcliff; *King George Co.*, mouth of Paspotansa Cr.; 2 mi. below Potomac Cr.; *Prince George Co.*, near City Point. MD.: *Prince Georges Co.*, Fort Washington; Upper Marlboro, Brooks Estate near Seat Pleasant; 2 mi. W. of Collington; *Charles Co.*, Glymont; Mattawoman (?); Liverpool Point; Clifton Beach; Reedy Run (branch of Chickomuxen Creek); 1 mi. SE. of Mason Springs; [?] *Co.*, 1 mi. NE. of Grimesville

*Type*.—Probably holotype, No. 30640 ANSP, Moore, 1962, p. 91

**Pitar ? ripleyanus** (Gabb)**Veneridae**

*Venus Ripleyana* Gabb, 1860d, p. 393, pl. 68, fig. 22

*Meretrix ripleyana* (Gabb), Harris, 1896, p. 67, pl. 6, figs. 6, 7 (?); Brann and Kent, 1960, p. 546

? *Pitaria ripleyana* (Gabb), Palmer, 1927/1929, p. 9, pl. 3, figs. 14 copy Gabb, 15 copy Harris

*Range*.—Paleocene. Midway gr. (type)

*Localities*.—TEXAS: *Kaufman Co.*, 4 mi. NE. of Kemp (Harris). TENN.: *Hardeman Co.* (type), 2 mi. SSE. of Middleton; 2 mi. E. of Middleton; Muddy Cr.; 3 mi. W. of Crainesville. GA.: [?] *Co.*, Chattahoochee R. to mouth of Sandy Cr. (Harris). ALA.: *Wilcox Co.*, cuts N. of Snow Hill (Harris)

*Type*.—Holotype, ANSP

**Pitar (Pitar) securiformis (Conrad)****Veneridae**

*Dione securiformis* Conrad, 1865b, p. 137, pl. 10, fig. 1; Conrad, 1866a, p. 24

*Pitaria (Pitaria) securiformis* (Conrad), Palmer, 1927/1929, p. 17, pl. 2, figs. 12, 14-16, 20 [figs. 16 & 20 mutations]; Brann and Kent, 1960, pp. 705, 706

*Pitaria securiformis* (Conrad) ?, Kellum, 1926, p. 24

*Callocardia (Agriopoma)* sp. cf. *C. (A.) securiformis* (Conrad), Gardner, 1945, p. 120 in part

*Pitar securiformis* (Conrad), Harris and Palmer, 1946, p. 94, pl. 21, figs. 1-3; Brann and Kent, 1960, p. 693

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr. (type); Yazoo clay, upper Jackson gr.; Danville Ldg. beds, uppermost Jackson gr.

*Localities*.—ARK.: *Cleveland Co.*, Vince Bluff, Saline R. MISS.: *Clarke Co.*, "Enterprise"—Garland Cr. (type) *fide* Aldrich 1885c, p. 307; *Hinds Co.*, Jackson; *Yazoo Co.*, Sims Siding, N. of Yazoo City. LA.: *Catahoula Par.*, Danville Ldg., Ouachita R.; *Caldwell Par.*, Bunker Hill, Ouachita R.; ½ mi. below Gibson's Ldg., Ouachita R.

*Type*.—Possible syntype ?, No. 13216 ANSP, not specimen figured by Conrad, Moore, 1962, p. 95

*Pitar cf. subimpressa* (Conrad), Harris, 1951

See Cf. "*Pitar*" sp.

**Pitar (Calpitar) texacola (Harris)****Veneridae**

*Meretrix texacola* Harris, 1895a, p. 50 in part, pl. 2, figs. 5, 5a, not 5 b (= *P. tornadonis*); Harris, 1919, p. 142 in part, pl. 44, figs. 13, 14, not 12, 12a, 15; not pl. 45, figs. 1-3; not Renick and Stenzel, 1931, p. 104, no. 7; not Brann and Kent, 1960, p. 547

*Pitaria (Pitaria) texacola* (Harris), Palmer, 1927/1929, p. 15 in part, pl. 2, fig. 19, not fig. 18; not Brann and Kent, 1960, p. 706, No. 1589

*Pitar (Calpitar) texacola* (Harris), Stenzel, Krause, and Twining, 1957, p. 145, pl. 18, figs. 3, 4; pl. 22, figs. 7-9

*Range*.—Middle Eocene. Tyus mem. (type), Weches fm.; Vieska mem., Weches fm., middle Claiborne gr.

*Localities*.—TEXAS: *Cherokee Co.*, Berryman's place, H. Kimble headright, about 4 mi. NE. of Alto (Bur. Ec. Geol. loc. no. 37-T-6) (type). See Stenzel, Krause, and Twining, 1957, p. 147; *Bastrop Co.*, Smithville, Colorado R.

*Type*.—Holotype, No. 20185 BEG

**Pitar (Calpitar) texibrazus Stenzel and Krause****Veneridae**

*Pitar (Calpitar) texibrazus* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 147, pl. 18, figs. 1, 2

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

*Type*.—Holotype, No. 20565 BEG

**Pitar (Calpitaria) tornadonis (Harris)****Veneridae**

*Meretrix texacola* Harris, 1895a, p. 50, in part, pl. 2, fig. 5b only;  
Renick and Stenzel, 1931, p. 104 in part, loc. 2, 3, 4, not loc. 1

*Meretrix texacola* var. *tornadonis* Harris, Harris, 1919, p. 142 in part,  
pl. 45, fig. 2, fig. 3 (type)

*Pitaria (Pitaria) texacola* (Harris), Palmer, 1927/1929, p. 15 in part,  
not pl. 2, figs. 18, 19

*Pitaria (Pitaria) texacola tornadonis* (Harris), Palmer, 1927/1929, p.  
16 in part, not pl. 2, figs. 7, 21=*Pitar* sp.; not Brann and Kent, 1960,  
p. 706=*Pitar* sp.

*Callocardia (Agriopoma) tornadonis* (Harris), Gardner, 1945, p. 117,  
pl. 9, figs. 24, 25

*Pitar (Calpitaria) tornadonis* (Harris), Stenzel, Krause, and Twining,  
1957, p. 148, pl. 17, figs. 11, 12 type, 13, 14, not 9, 10

*Cytherea texacola* (Harris), Gimbrede, 1962, p. 1119

*Cytherea tornadonis* (Harris), Gimbrede, 1962, p. 1117

*Range*.—Middle Eocene. Hurricane lentil (type), base Landrum  
mem., Cook Mt. fm., upper Claiborne gr.

*Localities*.—TEXAS: *Houston Co.*, S. fork of Hurricane Bayou  
(Bur. Ec. Geol., No. 113-T-2) (type) *fide* Stenzel, Krause, and  
Twining, 1957, p. 150); *Fayette Co.*, Colorado R. near old  
Shipp's Ford (Bur. Ec. Geol. loc. No. 11-T-29)

*Type*.—Holotype, No. 20184 BEG

*Pitar (Calpitaria) tornadonis* (Harris), Stenzel, Krause, and Twining,  
1957, p. 148, in part, pl. 17, figs. 9, 10

See *Pitar (Calpitaria)* sp.

*Pitar trigoniata* (Lea)

See *Katherinella trigoniata* (Lea)

**Pitar ? vespertinus (Conrad)****Veneridae**

*Venus vespertina* Conrad, 1857, p. 162, pl. 19, figs. 5, 5a; not *Cytherea*  
*vespertina* Conrad, 1848c, p. 433 (Dall reprint, 1909, p. 151); not  
*Dione vespertina* Conrad, 1865cc, p. 152; not *Dione vespertina* Meek,  
1864, p. 10

*Meretrix ? vespertina* (Conrad), Harris, 1919, p. 144, pl. 46, fig. 6  
copy type

? *Pitaria vespertina* (Conrad), Palmer, 1927/1929, p. 30, pl. 3, fig. 3  
copy type

*Range*.—Eocene (type)

*Locality*.—TEXAS: "Western" (type)

*Type*.—Not in USNM, presumably lost *fide* Harris, 1919, p. 144

**Pitar vetus (Whitfield)****Veneridae**

*Caryatis? veta* Whitfield, 1885, p. 218, pl. 28, figs. 16-19; Whitfield,  
1899, p. 155; Weller, 1907, p. 611, pl. 68, figs. 11-12. Not *Bucardia*  
*veta* Conrad, 1869b, p. 41 see *Glossus ? veta* Conrad

*Range*.—Lower Eocene. Mansasquan fm. (type). Cf. Middle  
Eocene. Shark R. ml.

*Localities*.—N.J.: *Monmouth Co.*, Farmingdale (type); Squankum; cf. Shark R.; *Ocean Co.*, New Egypt

*Types*.—Figured specimens, fig. 16, No. 9016/3; fig. 17 not found; figs. 18, 19, No. 9016/1, AMNH

**Pitar (Lamelliconcha) yoakumi** (Gabb)

**Veneridae**

*Meretrix yoakumi* Gabb, 1862c, p. 370; Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; Harris, 1919, p. 150; Stenzel, Krause, and Twining, 1957, p. 39

*Pitaria (Lamelliconcha) yoakumi* (Gabb), Palmer, 1927/1929, p. 40, pl. 8, fig. 14 holotype

*Range*.—"Eocene." Cretaceous Woodbine gr., Cenomanian. *vide* Stenzel, Krause, and Twining, 1957, pp. 39, 40

*Locality*.—TEXAS: *Johnson Co.*, "a brown highly ferruginous sandstone . . . Caddo Peak" (type). "near Old Caddo P.O., on old road from Cleburne to Fort Worth, Johnson Co." (Stenzel, Krause, and Twining, 1957, p. 39).

*Type*.—Holotype, No. 3958 ANSP

**Pitar sp.**

**Veneridae**

*Callocardia* sp. Gardner, 1935, p. 186 [Not *Callocardia*]

*Range*.—Paleocene. Wills Point fm., upper Midway gr.

*Locality*.—TEXAS: *Maverick Co.*, 27 mi. SE. of Eagle Pass on the Windmill (Jacal) ranch road

*Type*.—Unfigured specimen not found USNM, 1962

**Pitar sp.**

**Veneridae**

*Callocardia* sp. Gardner, 1935, p. 186. [Not *Callocardia*]

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Limestone Co.*, Comanche Crossing; *Falls Co.*, Whitaker Survey about 6 mi. NW. of Kosse; ½ mi. below Travis-Bastrop Co. line; Cribbs Bluff, Brazos R. little over a mile below Falls Co. line

*Types*.—Unfigured specimens not found USNM, 1962

**Cf. Pitar sp.**

**Veneridae**

*Cytherea* sp. Harbison, 1944, p. 6, pl. 3, fig. 3

*Range*.—Middle Eocene. Santee ls., upper Claiborne gr.

*Locality*.—S.C.: *Berkeley Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner

*Type*.—Figured specimen, ANSP

**Pitar sp.**

**Veneridae**

*Meretrix texacola* Harris, 1919, p. 144 in part, pl. 44, figs. 12, 12a; Brann and Kent, 1960, p. 547

*Pitaria (Pitaria) texacola* (Harris), Palmer, 1927/1929, p. 16 in part, pl. 2, fig. 18; Brann and Kent, 1960, p. 706

This shell deserves a new name but we prefer not to present a new name without further critical study.

*Range*.—Middle Eocene. Cook Mt. fm., [upper Lisbon fm.], upper Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.

*Types*.—Figured specimens, Nos. 1177, 1178 PRI

**Pitar sp.****Veneridae**

*Meretrix texacola* ? Harris, Harris, 1919, p. 142, in part, pl. 44, fig. 15

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: Calhoun Co., Keitts [Kitt's] Ravine, 4½ mi. NW. of Creston (type)

*Type*.—Figured specimen missing USNM prior to 1962

**Pitar spp. or Callista spp.****Veneridae**

*Meretrix* sp. close to *M. poulsoni* Conrad, Harris, 1919, p. 144

*Range*.—Middle Eocene. McBean fm., upper Claiborne gr.

*Localities*.—N.C.: Craven Co., Newbern age not determined. GA.: Burke Co., Shell Bluff

*Types*.—Specimens not available

**Pitar sp.****Veneridae**

*Pitar* cf. *cornelli* (Harris), Harris, 1951, p. 22, pl. 11, figs. 4, 5; Brann and Kent, 1960, pp. 691, 692

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—GA.: Houston Co., Pennsylvania Cement Corp., Plant 2, Clinchfield Quarry

*Types*.—Figured specimens, Nos. 24502, 24503 PRI

**Cf. "Pitar" sp.****Veneridae**

*Pitar* cf. *subimpressa* (Conrad), Harris, 1951, p. 22, pl. 11, figs. 6-8. Brann and Kent, 1960, p. 694. Not *Macrocallista subimpressa* (Conrad)

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Localities*.—GA.: Houston Co., Georgia Lime Rock Quarry, U.S. Rte. 41, Perry; Pennsylvania Cement Corp., Plant 2, Clinchfield Quarry

*Types*.—Figured specimens, Nos. 24504-24506 PRI

**Pitar (Calpitaria) sp.****Veneridae**

*Pitar (Calpitaria) tornadonis* (Harris), Stenzel, Krause, and Twining, 1957, p. 148 in part, pl. 17, figs. 9, 10

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—TEXAS: Fayette Co., 4 mi. E. of Smithville, near abandoned Shipp's Ford (see Stenzel, Krause, and Twining, 1957, p. 210)

*Type*.—Figured specimen, No. 20769 BEG

**Pitar sp.****Veneridae**

*Pitar* sp. Harbison, 1944, p. 6, pl. 3, fig. 4

*Range*.—Middle Eocene. Santee ls., upper Claiborne gr.

*Locality*.—S.C.: Berkeley Co., Santee-Cooper Canal, 17 mi NW. of Moncks Corner

*Type*.—Figured specimen, ANSP



**Pitar sp.****Veneridae**

*Pitar* sp. cf. *nuttali* (Conrad), Harris, 1951, p. 22, pl. 11, figs. 1, 2;  
Brann and Kent, 1960, p. 692

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Localities*.—GA.: Houston Co., Clinchfield Quarry. FLA.: Marion Co., near Kendrick

*Type*.—Figured specimens, Nos. 24499, 24500 PRI

**Pitar (Calpitaria) sp.****Veneridae**

*Pitaria* (*Pitaria*) *texacola tornadonis* (Harris), Palmer, 1927/1929, p. 16 in part, pl. 2, figs. 7, 21; Brann and Kent, 1960, p. 706

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R.

*Types*.—Figured specimens, Nos. 1580, 1590 PRI

*Pitaria* (*Pitaria*) *angelinae* (Harris)

See *Pitar angelinae* (Harris)

*Pitaria astartoides* (Gardner)

See *Rhabdopitaria astartoides* (Gardner)

See also *Rhabdopitaria pricei* Palmer

*Pitaria* (*Pitaria*) *cornelli* (Harris)

See *Pitar (Pitar) cornelli* (Harris)

*Pitaria* (*Pitaria*) *eversa* (Conrad)

See *Pitar eversus* (Conrad)

? *Pitaria exigua* (Conrad)

See *Pitar ? exiguus* (Conrad)

*Pitaria gazleyensis* Palmer

See *Pitar gazleyensis* (Palmer)

*Pitaria juliae* Palmer

See *Pitar juliae* (Palmer)

*Pitaria* (*Pitaria*) *lenis* (Conrad)

See *Pitar lenis* (Conrad)

*Pitaria* (*Lamelliconcha*) *macbeani* Harris

See *Pitar (Lamelliconcha) macbeani* (Harris)

*Pitaria* (*Pitaria*) *nuttali* (Conrad)

See *Pitar (Pitar) nuttali* (Conrad)

*Pitaria* (*Pitaria*) *nuttalliopsis* (Heilprin)

See *Pitar (Pitar) nuttalliopsis* (Heilprin)

*Pitaria* (*Pitaria*) *nuttalliopsis fulva* (Harris)

See *Pitar (Pitar) nuttalliopsis fulvus* (Harris)

*Pitaria* (*Pitaria*) *nuttalliopsis greggi* (Harris)

See *Pitar (Pitar) nuttalliopsis greggi* (Harris)

*Pitaria* (*Pitaria*) *nuttalliopsis heilprini* Palmer

See *Pitar (Pitar) nuttalliopsis heilprini* (Palmer)

*Pitaria (Pitaria) ovata* (Rogers)See *Pitar (Pitar) ovatus* (Rogers and Rogers)*Pitaria poulsoni* (Conrad)See *Pitar poulsoni* (Conrad)*Pitaria (Rhabdopitaria) pricei* PalmerSee *Rhabdopitaria pricei* Palmer*Pitaria (Pitaria) pyga* (Conrad)See *Pitar (Pitar) pyga* (Conrad)*Pitaria ripleyana* (Gabb)See *Pitar ? ripleyanus* (Gabb)*Pitaria (Pitaria) securiformis* (Conrad)See *Pitar (Pitar) securiformis* (Conrad)*Pitaria (Pitaria) texacola* (Harris), Palmer, 1927/1929See *Pitar* sp.See also *Pitar (Calpitaria) tornadonis* (Harris)*Pitaria (Pitaria) texacola* (Harris), Palmer, 1927See *Pitar (Calpitaria) petropolitanus* Stenzel and KrauseSee also *Pitar (Calpitaria) texacola* (Harris)See also *Pitar* sp.*Pitaria (Pitaria) texacola tornadonis* (Harris) in partSee *Pitar (Calpitaria)* sp.See also *Pitar (Calpitaria) tornadonis* (Harris)*Pitaria (Lamelliconcha) trigoniata* (Lea)See *Katherinella trigoniata* (Lea)*Pitaria (Lamelliconcha) trigoniata bastropensis* (Harris)See *Katherinella ? trigoniata bastropensis* (Harris)See also *Katherinella ?* sp.See also *Pitar "(Agriopoma)" amichel* Gardner*Pitaria ? vespertina* (Conrad)See *Pitar ? vespertinus* (Conrad)*Pitaria (Rhabdopitaria) winnensis* (Harris)See *Rhabdopitaria winnensis* (Harris)*Pitaria (Lamelliconcha) yoakumi* (Gabb)See *Pitar (Lamelliconcha) yoakumi* (Gabb)*Plagiocardium (Schedocardia) hatchetigbeense* (Aldrich)See *Acanthocardia (Schedocardia) hatchetigbeensis* (Aldrich)**Cf. Plagiocardium** sp.**Cardiidae***Cardium tuomeyi* Aldrich var. Harris, 1899b, p. 303, pl. 53, figs. 9, 10*Cardium (Cerastoderma) tuomeyi* Aldrich var. Barry, 1942+, p. 66, pl.8, figs. 4-6; not pl. 9, fig. 1 see *Acanthocardia tuomeyi* (Aldrich);

Wasem and Wilbert, 1943, p. 192, pl. 31, fig. 4

*Range*.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.; Pendleton Ferry fm., middle Wilcox [Sabine] gr.*Localities*.—LA.: Natchitoches Par., Marthaville; Sabine Par., La Nana Bayou near Many. For localities in Natchitoches Par.

and Sabine Par. see Barry, 1942+, p. 67. TEXAS: Sabine Co., Pendleton (Harris)

Type.—Figured specimen by Harris lost prior to 1937, PRI

*Plagiostoma dumosum* Morton

See *Spondylus dumosus* (Morton)

*Plagiostoma dumosum* Morton, Conrad, 1834; Aldrich, 1885c, 1886

See *Spondylus* sp.

*Pleuromeris aldrichi* Harris

See *Venericardia* (*Pleuromeris*) *aldrichi* Harris

### **Plicatula filamentosa** Conrad

### **Plicatulidae**

*Plicatula filamentosa* Conrad, 1833b, p. 38 [not illus.], (Harris, reprint 1893, p. 60); Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 105; d'Orbigny, 1850, p. 394; Conrad, 1865a, p. 14; Conrad, 1866a, p. 3; Aldrich, 1886, p. 49; de Gregorio, 1890, p. 179, pl. 21, figs. 1-10, fig. 11 copy *P. mantelli* Lea; Cossmann, 1893, p. 18; Harris, 1895b, p. 19; Dall, 1898b, p. 762; Harris, 1919, p. 18, pl. 12, figs. 3-8; Harris and Palmer, 1946, p. 25 in part, not pl. 6, figs 1, 1a Jackson Eocene, see *Plicatula* sp.; not Harris, 1951, p. 7; Brann and Kent, 1960, pp. 720, 721 in part

*Plicatula Mantilli* [sic] Lea, 1833, p. 89, pl. 3, fig. 68 [incorrectly spelled *Mantilli*, named for Mantell]

*Plicatula Mantelli* Lea, H. C. Lea, 1849, p. 105; Tuomey, 1858, p. 267; Harris, 1895b, p. 27=*P. filamentosa* Conrad

*Spondylus amussiopse* de Gregorio, 1890, p. 179, pl. 20, figs. 11-13; Dall, 1898b, p. 761=young of *Plicatula filamentosa* Conrad

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.; Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Missing ANSP, Moore, 1962, p. 60

*Plicatula filamentosa* Conrad, Kellum 1926, p. 21; Harris and Palmer, 1946, p. 25 in part; Richards, 1950, p. 18; Harris, 1951, p. 7

See *Plicatula* spp.

### **Plicatula filamentosa** Conrad "var."

### **Plicatulidae**

*Plicatula filamentosa* Conrad var., Harris, 1897b, p. 41 in part, pl. 6, figs. 8, 9; Brann and Kent, 1960, pp. 720, 721

Range.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R.

Types.—Figured specimens No. 218, 219 PRI

### **Plicatula filamentosa** Conrad "var."

### **Plicatulidae**

*Plicatula filamentosa* Conrad var. Renick and Stenzel, 1931, p. 93, pl. 7, figs. 26-28

Range.—Middle Eocene. Crockett fm., [Cook Mt. fm.], upper Claiborne gr.

Locality.—TEXAS: Brazos Co., Little Brazos R., near old inter-urban crossing

Types.—Figured specimens, No. 21308, BEG (fig. 26), No. 21309 BEG (fig. 27), No. 21310 BEG (fig. 28)

**Plicatula filamentosa concentrica** Dall**Plicatulidae**

*Plicatula filamentosa concentrica* Dall, 1898b, p. 762; Schuchert, *et al.*, 1905, p. 525; Harris, 1919, p. 19, pl. 12, figs. 9-12; Brann and Kent, 1960, pp. 721, 722

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—TEXAS; *Cherokee Co.*; *Anderson Co.*, *Houston Co.*;

*Robertson Co.* LA.: *Sabine Par.*, Columbus; Negreet. MISS.:

*Clarke Co.*, Wautubbee ["Wautubbee Hills"] (type)

*Type*.—Holotype, No. 139082 USNM

**Plicatula filamentosa planata** Meyer and Aldrich**Plicatulidae**

*Plicatula planata* Meyer and Aldrich, 1886, p. 45, pl. 2, fig. 20

*Plicatula filamentosa planata* Meyer and Aldrich, Dall, 1898b, p. 762 as mutation *P. filamentosa* Con.; Harris, 1919, p. 19, pl. 12, figs. 13-17 Meyer and Aldrich, not Aldrich; Brann and Kent, 1960, p. 722

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: *Clarke Co.*, Wautubbee; *Newton Co.*, Hickory;

*Newton* (type). LA.: *Winn Par.*, Cooper's Well depth 1000 ft.,

Winnfield; St. Maurice

*Type*.—Holotype, No. 638744 USNM

**Plicatula ? louisiana** Harris**Plicatulidae**

*Plicatula* (?) *louisiana* Harris in Harris and Palmer, 1946, p. 24, pl. 5, figs. 5, 5a; Brann and Kent, 1960, p. 722

*Range*.—Upper Eocene. Jackson gr. (type)

*Locality*.—LA.: *Grant Par.*, Montgomery Bluff, upper layer

Red R. (type)

*Type*.—Holotype, No. 4149 PRI. Lost prior to 1957

*Plicatula Mantelli* Lea [*Mantilli* sic]

See *Plicatula filamentosa* Conrad

*Plicatula planata* Meyer and Aldrich

See *Plicatula filamentosa planata* Meyer and Aldrich

**Plicatula** sp.**Plicatulidae**

*Plicatula*? Harris, 1896, p. 47, pl. 2, figs. 2, 2a; Dall, 1898b, p. 763; Brann and Kent, 1960, p. 723

*Range*.—Paleocene. Clayton fm., lower Midway gr.

*Locality*.—ALA.: *Wilcox Co.*, ½ mi. E. of McConnico's, near Palmer's mill

*Type*.—Figured specimen, No. 47 PRI

**Plicatula** sp.**Plicatulidae**

*Plicatula filamentosa* Conrad, Kellum, 1926, p. 21, pl. 2, figs. 5, 6; Richards, 1950, p. 18. Not Conrad, 1833b

*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.

*Localities*.—N.C.; *New Hanover Co.*, Wilmington; *Onslow Co.*, 10 mi. N.W. of Jacksonville

*Types*.—Figured specimens, Nos. 353237 (fig. 5), 353290 (fig. 6) USNM

**Plicatula spp.****Plicatulidae**

*Plicatula filamentosa* Conrad, Harris and Palmer, 1946, p. 25, pl. 6, figs. 1 not Jackson, Miss., 1a; Harris, 1951, p. 7, pl. 2, figs. 6-9; Brann and Kent, 1960, p. 721 in part. Not Conrad, 1833b

*Range*.—Upper Eocene. Jackson gr. and Ocala gr.

*Localities*.—ALA.: *Choctaw Co.*, W. of Silas and 1 mi. E. of old Fail Post Office. LA.: *Caldwell Par.*, Bunker Hill Ldg., Ouachita R. FLA.: *Marion Co.*, E. of Kendrick. GA.: *Lee Co.*, Armena Lime Mines, Armena

*Types*.—Figured specimens, Nos. 4150, 4151, 24439-24442 PRI

*Polorthus americanus* (Gabb)

See *Kummelia americana* (Gabb)

**Polorthus tibialis** (Morton)**Teredinidae**

*Teredo tibialis* Morton, 1834, p. 68, pl. 9, fig. 2; Gabb, 1861, p. 230; Meek, 1864, p. 16; Whitfield, 1885, p. 201, pl. 26, figs. 19-22; Whitfield, 1899, p. 165; Johnson, 1905, p. 18

*Polorthus tibialis* (Morton), Gabb, 1862b, p. 366; Stoliczka, 1871, p. 14; Gabb, 1872, p. 259, pl. 8, figs. 1-7; Weller, 1907, p. 659, pl. 74, figs. 12-15

*Range*.—Lower Eocene. Vincentown fm. (type)

*Localities*.—N.J.: *Ocean Co.*, near New Egypt; *Gloucester Co.*, near Hurffville; boundary between *Gloucester* and *Camden Cos.*, Timber Creek (type)

*Type*.—ANSP (Johnson, 1905)

**Poromya mississippiensis** Meyer and Aldrich**Poromyidae**

*Poromya mississippiensis* Meyer and Aldrich in Meyer, 1887a, p. 10, pl. 2, figs. 1, 1a, 1b; Dall, 1903a, p. 1508; Harris and Palmer, 1946, p. 118, pl. 25, figs. 3-5; Brann and Kent, 1960, p. 734 (not Aldrich and Meyer as in Harris and Palmer; Brann and Kent)

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type); *Clarke Co.*, Garland Creek

*Types*.—Syntypes fig. 1 (upper), No. 638883 USNM; figs. 1 (lower), 1b, No. 638884 USNM

*Propeamussium alabamense* (Aldrich)

See *Amusium (Propeamussium) alabamense* (Aldrich)

*Protocardia actia* Gardner

See *Nemocardium actium* (Gardner)

*Protocardia (um) curta (um)* Conrad

See *Nemocardium curtum* (Conrad)

*Protocardia diversa* (Conrad), Gabb, 1862c

See *Nemocardium gambrinum* (Gabb)

*Protocardia gambrina* Gabb

See *Nemocardium gambrinum* (Gabb)

*Protocardia gambrina harrisi* Dall, Brann and Kent

See *Nemocardium gambrinum* (Gabb)

See also *Nemocardium harrisi* (Dall)



*Protocardia harrisi* DallSee *Nemocardium harrisi* (Dall)*Protocardia lenis* (Conrad)See *Nemocardium lene* (Conrad)*Protocardia lenis* (Conrad), Clark and MartinSee *Nemocardium* sp.*Protocardia lenis* var. Harris, 1897b not Conrad, 1856aSee *Nemocardium harrisi* (Dall)*Protocardia lima* ConradSee *Nemocardium nicolletti* (Conrad)*Protocardia nicolletti* (Conrad)See *Nemocardium nicolletti* (Conrad)*Protocardia nicolletti* (Conrad) var. Aldrich, 1886 not Conrad, 1841See *Nemocardium harrisi* (Dall)*Protocardia nicolletti* Conrad var. Harris, 1896See *Nemocardium*, n. sp.*Protocardia quihi* GardnerSee *Nemocardium quihi* (Gardner)*Protocardia salrivalis* HarrisSee *Nemocardium salrivale* (Harris)*Protocardia virginiana* ConradSee *Nemocardium lene* (Conrad)*Protocardia virginiana* Harris, 1897a, not Conrad, 1864See *Nemocardium harrisi* (Dall)*Protocardia* sp.See *Nemocardium* sp.**"Protocardia" sp.****Cardiidae***Protocardia* sp. Harris, 1894b, p. 44, pl. 1, fig. 4*Range*.—Paleocene. Clayton fm., lower Midway gr.*Localities*.—ARK.: *Pulaski Co.*, Fourche Cr., near mouth Crooked Cr., near Alexander (Harris, pp. 28, 44); Dr. Johnson's well, top Capitol Hill, Battery & 9th Sts., Little Rock (Harris, p. 26); Ulrich coll. (Harris, 1894b)*Type*.—Figured specimen (USNM, 1894)*Psammobia*=*Gari* or *Garum**Psammobia blainvillii* (Lea) [*blainvillei*]See *Gari* (*Gobraeus*) *blainvillii* (Lea)*Psammobia* (*Garum*) *claibornensis* DallSee *Garum claibornense* Dall*Psammobia eborea* Conrad, Brann and Kent error for *Egerella triangulata* (Lea)See *Egerella limatula* (Conrad)

*Psammobia eborea* Conrad  
See *Gari eborea* (Conrad)

*Psammobia eborea* (Conrad), Heilprin, 1884b  
See *Gari (Gobraeus) blainvillii* (Lea)

*Psammobia filosa* Conrad  
See *Garum filiosum* (Conrad)

*Psammobia harrisi* Aldrich  
See *Gari harrisi* (Aldrich)

*Psammobia ozarkana* Harris  
See *Gari (Gobraeus) ozarkana* (Harris)

*Psammobia (Gobraeus) papyria* Conrad, Dall, 1898c, p. 60. Not *Psammobia papyria* Conrad, 1848a, p. 291=Vicksburg Oligocene

*Psammobia Smithi* Aldrich  
See *Gari smithi* (Aldrich)

*Pseudamussium calvatum* (Morton)  
See *Eburneopecten calvatus* (Morton)

*Pseudamussium claibornense* Harris  
See *Eburneopecten corneoides* (Harris)

*Pseudamussium frontalis* Dall  
See *Eburneopecten frontalis* (Dall)

*Pseudochama harrisi* Gardner  
See *Chama harrisi* (Gardner)

#### **Pseudochama sp.**

**Chamidae**

*Chama* sp. Harris, 1919, p. 131, pl. 41, fig. 4

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—TEXAS: Lee Co., between Orell's Crossing and Evergreen Crossing of Elm Cr. (see Stenzel, Krause, and Twin-ing, 1957, p. 44)

*Type*.—Figured specimen (originally Texas State Museum). Missing, 1963

#### **Pseudomiltha megameris Dall**

**Lucinidae**

*Lucina (Pseudomiltha?) megameris* Dall, 1901b, p. 40

*Phacoides (Pseudomiltha) megameris* Dall, Dall, 1901c, pp. 806, 829, pl. 42, fig. 1

Cf. *Pseudomiltha megameris* Dall, Richards and Palmer, 1953, p. 48, pl. 10, fig. 6

*Range*.—Cf. Middle Eocene. Avon Park ls., upper Claiborne gr. Upper Eocene. Gibraltar ls. (type) Butterlin, 1956; Inglis fm. lower Ocala gr. (Richards)

*Localities*.—JAMAICA, W.I.: *St. Ann's Par.*, [Clairmont sic] Clarendon (type). cf. FLA.: *Levy Co.*, sec. 14, T. 14 S., R. 15 E., Dunnellon Phosphate Mining Co., SW.  $\frac{1}{4}$  SE.  $\frac{1}{4}$  sec. 10, T. 18 S., R. 19 E.

*Types*.—[Syntypes?] lectotype herein designated, No. 147592 USNM

**Pteria ? annosa (Conrad)****Pteriidae**

*Avicula annosa* Conrad, 1865e, p. 214, pl. 20, fig. 16; Conrad, 1866a, p. 4; Conrad, 1868, p. 731 not "Meek, 1868, p. 731" as Whitfield, 1885 p. 226; Whitfield, 1885, p. 226, pl. 29, fig. 9; Dall, 1898b, p. 669 regarded as gastropod; Whitfield, 1899, p. 154

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N.J.: *Monmouth Co.*, Shark R. (type)

*Type*.—Holotype, State Mus., Trenton, N.J.

**"Pteria cf. argentea" (Conrad)****Pteriidae**

*Avicula argentea* Conrad, 1848a, p. 295; Conrad, 1848b, p. 126, pl. 12, fig. 10 Vicksburg Oligocene

*Pteria cf. argentea* (Conrad), Harris, 1951, p. 13, pl. 6, fig. 6; Brann and Kent, 1960, p. 752. Compared with Vicksburg species.

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr. Oligocene. Vicksburg (type)

*Locality*.—GA.: *Houston Co.*, Georgia Lime Rock Quarry, about 4 mi. from Perry

*Type*.—Figured specimen, No. 24466 PRI "Ocala ls."

**Pteria deusseni Gardner****Pteriidae**

*Pteria deusseni* Gardner, 1935, p. 134, pl. 7, fig. 8; Stenzel, Krause, and Twining, 1957, p. 82

*Pteria* sp. cf. *P. deusseni* Gardner, Gardner, 1945, p. 59 Mexico

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Limestone Co.*, U.S.G.S. Sta. 6559, Comanche Crossing on Navasota Cr., about 6 mi. W. of Mexia (type)

*Type*.—Holotype, No. 370964 USNM

**Pteria limula (Conrad)****Pteriidae**

*Avicula limula* Conrad, 1833c, p. 39 (Harris reprint, 1893, p. 65); Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 392; Conrad, 1865a, p. 11; Conrad, 1866a, p. 4; Harris, 1895b, p. 24; Dall, 1898b, p. 669; Teppner, 1914, p. 6

*Avicula claibornensis* Lea, 1833, p. 86, pl. 3, fig. 65; Conrad, App. in Morton, 1834, p. 6=*A. limula* Conrad; H. C. Lea, 1849, p. 96; Tuomey, 1858, pp. 264, 273; de Gregorio, 1890, p. 183, pl. 22, fig. 4 copy Lea; Cossmann, 1893, p. 18=*A. cardincrassa*; Harris, 1895b, p. 10=*A. limula*; Dall, 1898b, p. 669

*Avicula cardincrassa* de Gregorio, 1890, p. 184, pl. 22, figs. 1-2; Dall, 1898b, p. 669

*Pteria limula* (Conrad), Dall, 1898b, p. 669; not Clark and Martin, 1901, p. 194, pl. 51, fig. 1; Harris, 1919, p. 29 in part, pl. 16, figs. 3-7, not 2-3 as in expl.; not Shimer and Shrock, 1944, p. 391, pl. 152, fig. 9 copy Clark and Martin; Gardner, 1945, p. 59 in part; Stenzel, Krause, and Twining, 1957, p. 82, pl. 7, figs. 10-13; Brann and Kent, 1960, p. 752

*Pteria trigona* (Conrad) (not Lamarek), Dall, 1898b, p. 669. Not *Avicula trigonata* Lamarek, 1819, p. 150 probably name meant by Conrad, 1842b, p. 175, "*Avicula trigona*."

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, "Claiborne sands" (type)=Claiborne Bluff, Alabama R.; Rock Branch near Monroeville (Tuomey); *Clarke Co.*, Little Stave Creek, near Jackson

*Types*.—Probable syntypes (2), No. 30540 ANSP, Moore, 1962, p. 70

*Pteria limula* (Conrad), Harris, 1919, p. 30 in part  
See *Pteria* sp.

*Pteria limula* (Conrad), Clark and Martin, 1901; Shimer and Shrock, 1944  
See *Pteria* sp.

***Pteria limula vanwinkleae* Harris**

**Pteriidae**

*Pteria limula vanwinkleae* Harris in Harris and Palmer, 1946, p. 37, pl. 10, figs. 1-4; Stenzel, Krause, and Twining, 1957, p. 82; Brann and Kent, 1960, p. 753

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson, Moodys Branch (type).  
LA.: *Grant Par.*, Montgomery, Red R.; *Caldwell Par.*, Gibsons Ldg., Ouachita R.; *Sabine Par.*, "Jackson beds on the Sabine River."

*Types*.—Holotype, No. 4182; paratypes, Nos. 4183, 4184 PRI

***Pteria (Pteria) petropolitana* Stenzel and Twining**

**Pteriidae**

*Pteria (Pteria) petropolitana* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 81, pl. 7, figs. 14-15, text fig. 12

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: *Burleson Co.*, Stone City Bluff (type)

*Type*.—Holotype, No. 20687 BEG

*Pteria trigona* (Conrad), 1842b, not *Avicula trigonata* Lamarck, 1819, p. 150  
See *Pteria limula* (Conrad)

***Pteria* sp.**

**Pteriidae**

? *Pteria limula* (Conrad), Harris, 1919, p. 30 in part

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—TEXAS: *Houston Co.*, Crockett

*Type*.—Specimen, Coll. Univ. Texas, probably lost

***Pteria* sp.**

**Pteriidae**

*Avicula limula* Conrad, Aldrich, 1886, p. 54. Not Conrad, 1833c, p. 39  
*Avicula* sp. Harris, 1897b, p. 46, pl. 7, fig. 7, 7a; Brann and Kent, 1960, p. 111

*Range*.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R.

*Type*.—Figured specimen, Harris, No. 190 PRI

**Pteria sp.****Pteriidae**

*Avicula* sp. Harris, 1896, p. 48, pl. 2, figs. 4, 4a; Dall, 1898b, p. 669; Brann and Kent, 1960, p. 111

*Range*.—Paleocene. Midway gr.

*Locality*.—GA.: *Clay Co.*, mouth of Sandy Creek, Chattahoochee R.

*Type*.—Figured specimen, No. 48 PRI

**Pteria sp.****Pteriidae**

*Pteria limula* (Conrad), Clark and Martin, 1901, p. 194, pl. 51, fig. 1 probably not of Conrad; Shimer and Shrock, 1944, p. 391, pl. 152, fig. 9 copy of Clark and Martin

*Range*.—Paleocene. Aquia fm. Lower Eocene. Nanjemoy fm.

*Localities*.—MD.: *Prince Georges Co.*, Upper Marboro; *Charles Co.*, Popes Creek; Hills Bridge.

*Type*.—Figured specimen, USNM

*Pteromeris minutissima* (Lea)

See *Micromeris minutissima* (Lea)

**Pteropsella lapidosa** (Conrad)**Mactridae**

*Lutraria lapidosa* Conrad, App. in Morton, 1834, p. 8 *nomen nudum*; Conrad, 1846b, p. 215, pl. 2, fig. 7 (not pl. 1 as in text); Conrad, 1848a, p. 298; Tuomey, 1848, pp. 148, 151, 153, 157, 159, 161, 168; Conrad, 1848b, p. 129; H. C. Lea, 1849, p. 101

*Lutraria petrosa* Conrad, 1848a, p. 298; Tuomey, 1848, pp. 148, 151, 153, 157, 159, 161, 168

*Astarte Conradi* Dana, 1863, p. 516, fig. 800; Conrad, 1866a, p. 5; Heilprin, 1884a, p. 152=young of *Crassatella alta*; Heilprin, 1884b, p. 38; Aldrich, 1886, pp. 39, 48, pl. 4, fig. 7; de Gregorio, 1890, p. 202, pl. 27, fig. 35 copy Aldrich; Cossmann, 1893, p. 13

*Pteropsis lapidosa* (Conrad), Conrad, 1865a, p. 4; Conrad, 1866a, p. 8; Harris in Dana, 1895, p. 916; Dall, 1898b, p. 881; Harris, 1919, p. 178, pl. 54, figs. 14, 15; Trowbridge, 1932, pl. 41, figs. 10, 11; Cooke, 1936, pp. 58, 64, 65; Gardner, 1945, p. 112, pl. 9, figs. 30 (as *incertae sedis*) fig. 32 Mexican; Cooke and MacNeil, 1952, p. 24; Brann and Kent, 1960, p. 753

*Pteropsis Conradi* (Dana), Harris in Dana, 1895, p. 897, fig. 1483 same as Dana, 1863; Vaughan, 1896, pp. 20, 48

*Pteropsis harrisi* Van Winkle, 1921, p. 9, pl. 1, figs. 12, 13; Stenzel, Krause, and Twining, 1957, p. 128; Brann and Kent, 1960, p. 753

*Astarte* ? Renick and Stenzel, 1931, p. 104 in part, loc. 4 only

*Kymatox lapidosus* (Conrad), Stenzel, Krause, and Twining, 1957, p. 126, pl. 15, figs. 11-14, p. 180 *Pteropsella* Vokes, 1956, p. 763

*Range*.—Middle Eocene. McBean fm. (type) upper Claiborne gr.; Cook Mt. fm., upper Claiborne gr.; Laredo fm. (Gardner), upper Claiborne gr.

*Localities*.—S.C.: *Orangeburg Co.*, Orangeburg, (type, Conrad); Vance's Ferry, Santee R. (type *fide* Stenzel, Krause, and Twining). TEXAS: *Roberston Co.*, "Campbell's" (Campbell Cr. A. Gafford hdt.); Cedar Creek (see Sta. 46, Texas). LA.: *Bossier Par.*, near Red Land; *Lincoln Par.*, Chautauqua; *Bienville Par.*, Hammetts Branch; Gibbsland (Gibbsland, Veatch, 1902). ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.; base of Claiborne Bluff, Alabama R. For Mexican localities see Gardner, 1945, p. 112

*Type*.—Holotype, No. 20218 ANSP, incorrectly labelled, Moore, 1962, p. 68



**Pteropsella papyria** (Conrad)**Mactridae**

*Lutraria papyria* Conrad, 1833a, p. 41 (Harris reprint, 1893, p. 67, pl. 19, fig. 7); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846b, p. 216, pl. 2 (not pl. 1 as in text), fig. 8; H. C. Lea, 1849, p. 101; Harris in Dana, 1895, p. 916; Harris, 1895b, p. 32

*Mactra dentata* Lea, 1833, p. 41, pl. 1, fig. 9; H. C. Lea, 1849, p. 101; de Gregorio, 1890, p. 228, pl. 36, fig. 12 copy Lea, in synonymy *Mactra decisa*; Harris, 1895b, p. 15

*Pteropsis papyria* (Conrad), Conrad [not Gabb as in Harris, 1919 synonymy], 1860, p. 296; Conrad, 1865a, p. 4; Conrad, 1866a, p. 8; Fischer, 1887, p. 1117; de Gregorio, 1890, p. 227, pl. 35, fig. 33 copy Conrad; Cossmann, 1893, p. 7; Dall, 1895a, p. 212; Dall, 1898b, pp. 881, 896; Harris, 1919, p. 178, pl. 54, figs. 13, 13a copy Conrad type; Stewart, 1930, p. 204; Brann and Kent, 1960, p. 753

*Pteropsella papyria* (Conrad), Vokes, 1956, p. 763 type species of *Pteropsella* Vokes

*Kymatox papyrius* (Conrad), Stenzel, Krause, and Twining, 1957, p. 130, pl. 16, figs. 1-3 lectotype and paralectotypes, p. 180 *Pteropsella* Vokes, 1956, p. 763

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes (lectotype and paralectotypes Stenzel, Krause, and Twining) (2), No. 30533 ANSP, Moore, 1962, p. 83

**Pteropsella praelapidosa** (Stenzel and Krause)**Mactridae**

*Pteropsis lapidosa* Conrad, Deussen, 1924, p. 67; ? Trowbridge, 1932, pl. 41, figs. 10, 11

*Astarte* ? Renick and Stenzel, 1931, p. 104, in part, loc. 1 only

*Kymatox praelapidosus* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 132, pl. 15, figs. 15, 16, text fig. 20 (p. 124); p. 180

*Pteropsella* Vokes, 1956, p. 763

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: Burlison Co., Stone City Bluff, Brazos R. (type)

*Type*.—Holotype, No. 20539 BEG

*Pteropsis conradi* Dana

See *Pteropsella lapidosa* (Conrad)

*Pteropsis harrisi* Van Winkle

See *Pteropsella lapidosa* (Conrad)

*Pteropsis lapidosa* (Conrad)

See *Pteropsella lapidosa* (Conrad)

*Pteropsis lapidosa* (Conrad) Deussen, 1924 not Conrad, 1846b

See *Pteropsella praelapidosa* (Stenzel and Krause)

*Pteropsis papyria* (Conrad)

See *Pteropsella papyria* (Conrad)

**Rhabdopitaria astartoides** (Gardner)**Veneridae**

*Callocardia astartoides* Gardner, 1923, p. 113, pl. 32, figs. 4-7; Trowbridge, 1932, pl. 41, figs. 2-5 copies Gardner

? *Pitaria astartoides* (Gardner) + *Pitaria* (*Rhabdopitaria*) *astartoides* (Gardner), Palmer, 1927/1929, pp. 30, 211, 212, pl. 44, figs. 15, 16

Not *Pitaria* (*Rhabdopitaria*) *astartoides* (Gardner), Price and Palmer, 1928, p. 27, pl. 6, figs. 1, 3-6; Brann and Kent, 1960, pp. 695, 696; see *R. pricei* Palmer in Price and Palmer, 1928, p. 28

*Rhabdopitaria astartoides* (Gardner), Stenzel, 1955, p. 145; Stenzel, Krause, and Twining, 1957, p. 155, pl. 18, figs. 7-10, text fig. 25, lectotype designated

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Localities*.—TEXAS; Webb Co., about 7 mi. up the Rio Grande from Laredo at Knob Bluffs,  $\frac{1}{4}$  mi. above pump of Santa Barbara farm (type); 500 yds. SW. of Espejo ranch, 8 mi. S. of Laredo;  $1\frac{1}{2}$  mi. N. of and a trifle E. of 3d gate, 7 mi. SE. of Velenzuela ranch house; Zapata Co., 39.9 mi. N. of Rio Grande City, Starr Co., on river road to Zapata, just N. of Lopeño P. O.; Houston Co., Alabama Ferry, Trinity R.

See Stenzel, Krause, and Twining, 1957, pp. 157, 158 for further locality details

*Types*.—Lectotype and paralectotype, No. 352272 USNM

**Rhabdopitaria discoidalis** (Conrad)**Veneridae**

*Cytherea discoidalis* Conrad, 1833b, p. 37, not pl. 19, fig. 4 as in Conrad = *Corbula nasuta* Con. (Harris reprint, 1893, p. 59). Not Harris, 1893, pl. 20, fig. 2 = *C. trigoniata* Lea; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 16 in part

*Cytherea discoidalis* Conrad, Conrad, App. in Morton, 1834, p. 7 in part; not Bronn, 1848a, p. 398

*Venus discoidalis* (Conrad), d'Orbigny, 1850, p. 380 in part

*Meretrix discoidalis* (Conrad), Conrad, 1854, p. 30; Harris, 1919, p. 146, not pl. 46, fig. 8 copy Harris, 1893

*Dione discoidalis* (Conrad), Conrad, 1865a, p. 6 in part; Conrad, 1866a, p. 7

*Cytherea trigoniata* Lea, de Gregorio, 1890, p. 218 in part, *C. discoidalis* in synonymy

*Omnivenus discoidalis* (Conrad), Palmer, 1927/1929, p. 115 in part, pl. 24, figs. 10, 19 (type); Aldrich, 1931, p. 7, pl. 6, figs. 4, 4a

*Rhabdopitaria discoidalis* (Conrad), Stenzel, Krause, and Twining, 1957, pp. 154, 155

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Syntype, No. 4134 ANSP Moore, 1962, p. 54

**Rhabdopitaria pricei** Palmer**Veneridae**

*Pitaria* (*Rhabdopitaria*) *pricei* Palmer in Price and Palmer, 1928, p. 28, pl. 6, figs. 9, 10; Brann and Kent, 1960, p. 703

*Pitaria* (*Rhabdopitaria*) *astartoides* (Gardner), Price and Palmer, 1928, p. 27, pl. 6, figs. 1, 3-6; Brann and Kent, 1960, pp. 695, 696.

Not *P. astartoides* (Gardner), 1923. See Stenzel, Krause, and Twining, 1957, pp. 157, 158

*Rhabdopitaria pricei* (Palmer), Stenzel, Krause, and Twining, 1957, pp. 155, 157, 158

*Range*.—Middle Eocene. Upper Queen City fm. (type), lower Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, mouth of Gazley Cr., Smithville, Colorado R. (type)

*Types*.—Holotype, No. 344; paratype, No. 346 PRI

***Rhabdopitaria subcrassa* (Lea)**

**Veneridae**

*Cytherea subcrassa* Lea, 1833, p. 67, pl. 2, fig. 43; Conrad, 1835a (Harris reprint, 1893, p. 116, pl. 20, fig. 6); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 43

*Venus subcrassa* (Lea), d'Orbigny, 1850, p. 380

*Cytherea trigoniata subcrassa* Lea, de Gregorio, 1890, p. 219, pl. 34, fig. 24 copy Lea

*Meretrix subcrassa* (Lea), Harris, 1919, p. 149, pl. 46, fig. 7 copy Lea; pl. 46, fig. 8 copy Conrad, 1835a (Harris reprint, 1893, pl. 20, fig. 6 under *C. subcrassa*); Palmer, 1927/1929, p. 115 [under *Omnivenus discoidalis* (Conrad)]

*Rhabdopitaria subcrassa* (Lea), Stenzel, Krause, and Twining, 1957, pp. 155, 157, pl. 18, figs. 11, 12

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5247 ANSP [*fide* Harris notebook, 1895c]

***Rhabdopitaria texangelina* Stenzel and Krause**

**Veneridae**

*Rhabdopitaria texangelina* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, pp. 155, 158, pl. 18, figs. 5, 6

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: North-central *Angelina Co.*, highway borrow pit at the edge of the river flood plain about 300 ft. east of U.S. Highway 59 (Lufkin-Nacogdoches road) 0.83 mi. S. of Angelina R., 2.5 mi. N. of the school at Redland, (Bur. Ec. Geol. loc. No. 3-T-18)

*Type*.—Holotype, No. 20538 BEG

***Rhabdopitaria winnensis* (Harris)**

**Veneridae**

*Meretrix trigoniata* var. *winnensis* Harris, 1919, p. 147, pl. 46, figs. 9-13; Brann and Kent, 1960, p. 548

*Pitaria* (*Rhabdopitaria*) *winnensis* (Harris) Palmer, 1927/1929, p. 212, pl. 44, figs. 17, 19; Brann and Kent, 1960, p. 707

*Rhabdopitaria winnensis* (Harris), Stenzel, Krause, and Twining, 1957, p. 155

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—LA.: *Winn Par.*, possibly along the St. Maurice rd. leading past the "Marble Quarry", W. of Winnfield (type); *Jackson Par.*, gullies N. of old Quitman-Liberty Hill rd. on Mrs. J. M. Turner's place, W. of Madden Cr. by rd. 3.60 mi. W. of R.R. crossing at Quitman, sec. 15, T. 16 N., R. 2 W.

*Types*.—Syntypes, Nos. 1185-1188 PRI

***Rochefortia minuta* (Aldrich)**

See *Mysella minuta* (Aldrich)

**Saccella ? atakta (Gardner)****Nuculanidae**

*Leda atakta* Gardner, 1927, p. 364, figs. 7, 8

? *Saccella* sp. cf. *S. atakta* (Gardner), Gardner, 1945, p. 48

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type)

*Type*.—Holotype, No. 369241 USNM

**Saccella catasarca (Dall)****Nuculanidae**

*Leda catasarca* Dall, 1898b, p. 588, pl. 32, fig. 13; Schuchert, *et al.*, 1905, p. 345; Harris, 1919, p. 66, pl. 25, figs. 5, 5a; Brann and Kent, 1960, p. 474

*Saccella catasarca* (Dall), Harris and Palmer, 1946, p. 61

*Range*.—Middle Eocene, Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: *Clarke Co.*, Wautubbee (type)

*Type*.—Holotype, No. 145646 USNM

*Saccella milamensis* (Harris)

See *Nuculana milamensis* (Harris)

**Saccella parva (Rogers and Rogers)****Nuculanidae**

*Nucula parva* Rogers and Rogers, 1837, p. 340; (reprint, 1884, p. 668), H. C. Lea, 1849, p. 102

*Leda parva* (Rogers), Conrad, 1854, p. 29

*Nuculana parva* (Rogers), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

*Leda parva* (Rogers), Clark, 1895, p. 5; Clark, 1896, p. 83, pl. 28, figs.

2a-d; Harris, 1897b, p. 53 in part, ? pl. 8, fig. 14 see *S. robusta*;

Dall, 1898b, p. 578 [not middle Eocene]; Clark and Martin, 1901, p.

197, pl. 56, figs. 5-7a; Van Winkle, 1921, p. 7 [not middle Eocene];

Brann and Kent, 1960, p. 478 see *S. robusta*

*Saccella parva* (Rogers), Harris and Palmer, 1946, p. 61

*Nuculana (Saccella) parva* (Rogers and Rogers), Shimer and Shrock, 1944, p. 377, pl. 146, fig. 28 copy Clark and Martin

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—VA.: [Co. ?] Pamunkey R., *Prince George Co.*, Coggin's Point, James R. (type); *King George Co.*, Woodstock; *Appomattox Co.*, Evergreen. MD.: *Charles Co.*, Popes Cr.; 2½ mi. above Popes Cr.

*Type*.—Unknown

**Saccella quercollis (Harris)****Nuculanidae**

*Leda quercollis* Harris, 1896, p. 55, pl. 4, fig. 11; Dall, 1898b, p. 578; Brann and Kent, 1960, p. 479

*Saccella quercollis* (Harris), Stewart, 1930, p. 57

*Range*.—Paleocene. Naheola fm. (type), upper Midway gr.

*Localities*.—ALA.: *Wilcox Co.*, 1 mi. W. of Oak Hill P. O. (type); Dales Branch near Oak Hill P.O.

*Type*.—Holotype, No. 37 PRI

**Saccella robusta (Aldrich)****Nuculanidae**

*Leda* n. sp. Aldrich, 1886, p. 53 [listed only]

*Leda robusta* Aldrich, 1895b, p. 17, pl. 5, figs. 1, 1a; Dall, 1898b, p. 578

*Leda parva* (Rogers), Harris, 1897b, p. 53 in part ? pl. 8, fig. 14; Brann and Kent, 1960, p. 478



*Nuculana (Saccella) robusta* (Aldrich), Harris and Palmer, 1946, p. 61, pl. 14, figs. 15, 16

*Range*.—Lower Eocene. Greggs Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.; Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type); 1¼ mi. WSW. of Choctaw Corners; Monroe Co., Greggs Ldg., Alabama R.; 4 mi. above Hamilton Bluff, Alabama R.

*Types*.—Syntypes, Nos. 638960 (fig. 1), 638961 (fig. 1a) USNM

**Saccella sp.**

**Nuculanidae**

*Nuculana* sp. Harris and Palmer, 1946, p. 61, pl. 14, figs. 12-14, section *Saccella*; Brann and Kent, 1960, p. 610

*Range*.—Unknown. (Harris collection associated with Louisiana Jackson Eocene material.)

*Locality*.—Unknown. (Harris collection associated with Louisiana Jackson Eocene material.)

*Type*.—Figured specimen, No. 4241 PRI

**Saccella sp.**

**Nuculanidae**

*Leda (Saccella) n. sp.*, Gardner, 1935, p. 120

*Range*.—Paleocene. Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: Falls Co., USGS, Sta. 11932, ¼ mi. W. of Stranger School

*Type*.—Unfigured specimen not found USNM, 1962

**Saxicavella alabamensis Aldrich**

**Saxicavidae**

*Saxicavella alabamensis* Aldrich, 1921, p. 21, pl. 3, figs. 4, 5

*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

*Type*.—Holotype, No. 46 GSATC

**Cf. Saxolucina aquiana (Clark)**

**Lucinidae**

*Lucina aquiana* Clark, 1895, p. 5; Clark, 1896, p. 78, pl. 20, figs. 1a, 1b; Clark and Martin, 1901, p. 174, pl. 37, figs. 1, 1a copy holotype; Schuchert, et al, 1905, p. 375

(?) *Lucina greggi* Harris, 1897a, p. 478 in part, pl. 22, fig. 5 (not fig. 6); Harris, 1897b, p. 70 in part, pl. 14, fig. 2a (not fig. 2)

*Phacoides aquianus* (Clark), Dall, 1903a, p. 1364

*Range*.—Paleocene. Aquia fm. (type)

*Localities*.—VA.: Stafford Co., Aquia Cr. (type). MD.: Prince Georges Co., Upper Marlboro

*Types*.—Syntypes, No. 148888 USNM

**Saxolucina (Plastomiltha) claibornensis (Conrad)**

**Lucinidae**

*Cyclas claibornensis* Conrad, 1865a, p. 8; Conrad, 1865c, p. 146

*Lucina claibornensis* (Conrad), not Aldrich, 1886, p. 57 (Greggs Ldg.); not Meyer, 1887a, p. 16 (Jackson); de Gregorio, 1890, p. 204; Coss-mann, 1893, p. 12; Harris, 1919, p. 121, pl. 39, figs. 8, 9, 9a; Brann and Kent, 1960, p. 505



*Phacoides (Miltha) claibornensis* (Conrad), Dall, 1903a, p. 1374 in part, pl. 50, fig. 18 not "Claiborne sands" as in text; Schuchert, *et al.*, 1905, p. 496

*Miltha (Plastomiltha) claibornensis* (Conrad), Stewart, 1930, p. 191

*Saxolucina (Plastomiltha) claibornensis* (Conrad), Chavan, 1938, p. 74, fig. 13

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type), Lisbon Bluff, Alabama R.; Hamilton Bluff, Alabama R.; *Dale Co.*, Ozark. GA.: *Clay Co.*, Ft. Gaines

*Types*.—Syntypes (2), No. 18855 ANSP Moore, 1962, p. 47

### **Saxolucina claytonia** (Harris)

### **Lucinidae**

*Lucina claytonia* Harris, 1896, p. 69, pl. 6, figs. 10, 10a; Brann and Kent, 1960, p. 505

*Phacoides (Miltha) claytonia* (Harris), Dall, 1903a, p. 1375

*Saxolucina Claytonia* (Harris), Chavan, 1938, pp. 70, 75

*Range*.—Paleocene. Clayton fm. (type), lower Midway gr.

*Locality*.—ALA.; *Barbour Co.*, R.R. cut, 1½ mi. NE. of Clayton (type)

*Types*.—Syntypes, Nos. 72, 74 PRI

### **Saxolucina (Plastomiltha) fortidentalis** (Harris)

### **Lucinidae**

*Lucina fortidentalis* Harris, 1896, p. 69, pl. 6, figs. 11, 11a; Brann and Kent, 1960 p. 506

*Range*.—Paleocene. Clayton fm. (type), lower Midway gr.

*Localities*.—ALA.: *Wilcox Co.*, 1 mi. N. of Midway. GA.: *Clay Co.*, "not far" N. of mouth of Sandy Cr., Chattahoochee R. (type)

*Types*.—Syntypes, Nos. 75, 76 PRI

### **Saxolucina (Plastomiltha) gaufia** Harris

### **Lucinidae**

*Lucina (Plastomiltha) gaufia* Harris in Harris and Palmer, 1946, p. 91, pl. 20, figs. 9-13; Brann and Kent, 1960, pp. 506, 507

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—ALA.: *Washington Co.*, Gopher Hill (Bakers Bluff) above St. Stephens Bluff, Tombigbee R. (type). LA.: *Grant Par.*, Montgomery, Red R. MISS.: *Clarke Co.*, Garland Cr.

*Types*.—Holotype, No. 4338; paratypes, Nos. 4339, 4340 PRI

### **Cf. Saxolucina greggi** (Harris)

### **Lucinidae**

*Lucina greggi* Harris, 1897a, p. 478 in part, pl. 22, fig. 6 (not fig. 5 = *S. aquiana*); Harris, 1897b, p. 70 in part, pl. 14, fig. 2 (not fig. 2a = *S. aquiana*)

*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type)

*Type*.—Holotype, ANSP

**Scintilla alabamiensis** Cossmann**Galeommatidae**

*Scintilla alabamiensis* Cossmann, 1893, p. 12, pl. 1, figs. 15, 16; Harris, 1919, p. 105, pl. 37, figs. 1, 2 copy Cossmann

*Solecardia* (*Spaniorinus*) *alabamiensis* (Cossmann), Dall, 1899, p. 882

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 11644 Lab. Géol., Sorbonne, Paris

**Scintilla clarkeana** Aldrich**Galeommatidae**

*Scintilla clarkeana* Aldrich, 1897a, p. 16, pl. 5, fig. 8

"*Scintilla*" *clarkeana* Aldrich, Harris, 1897b, p. 58, pl. 11, fig. 9 copy Aldrich

*Solecardia* (*Spaniorinus*) *clarkeana* (Aldrich), Dall, 1899, p. 882

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Choctaw Corner (type)

*Type*.—Holotype, No. 639001, USNM

**Semele australina** Harris**Semelidae**

*Semele australina* Harris, 1919, p. 172, pl. 52, figs. 9, 9a, 10 "var."; Brann and Kent, 1960, p. 790

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Localities*.—S.C.: Orangeburg Co., Orangeburg District (type).

TEXAS: Zapata Co., 15 mi. below Carrizo Cr. (variation Harris)

*Type*.—Holotype, No. 1238 PRI

**Semele langdoniana** Aldrich**Semelidae**

*Semele langdoniana* Aldrich, 1921, p. 18, pl. 2, figs. 19, 20, holotype, left valve

*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

*Type*.—Holotype, No. 44 GSATC

**Semele linosa** (Conrad)**Semelidae**

*Amphidesma linosa* Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68, pl. 19, fig. 13); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846c, p. 397, pl. 4, fig. 2; H. C. Lea, 1849, p. 95 *linosum*; d'Orbigny, 1850, p. 377; Harris, 1895b, p. 23

*Syndosmya linosa* (Conrad), Conrad, 1854, p. 29

*Semele linosa* (Conrad), Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; de Gregorio, 1890, p. 276, pl. 35, fig. 29 copy Conrad; Dall, 1900, p. 986; Harris, 1919, p. 170, pl. 52, figs. 1-3 not Jackson Eocene; Brann and Kent, 1960, p. 790

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes (2), No. 20253 ANSP Moore, 1962, p.

**Semele linosa** Conrad "var."**Semelidae**

*Semele linosa* Conrad var. Harris, 1919, p. 171, pl. 52, figs. 5, 5a

*Range*.—Middle Eocene. McBean fm., upper Claiborne gr.

*Locality*.—S.C.: Calhoun Co., Keitt's Ravine [Kitts], 4½ mi. NW. of Creston

*Type*.—Figured specimen, USNM missing prior to 1962

**Semele linosa claibornensis** Harris**Semelidae**

*Semele profunda* ? Dall, 1900, p. 986

*Semele linosa* var. *claibornensis* Harris, 1919, p. 171, pl. 52, figs. 4, 4a, fig. 6, p. 171 *S. linosa* var. locality and specimen unknown

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 129548 USNM, missing 1962

**Semele monroensis** Aldrich**Semelidae**

*Semele monroensis* Aldrich, 1921, p. 19, pl. 2, figs. 21, 22

*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

*Type*.—Holotype, No. 45 GSATC

**Semele profunda** (Conrad)**Semelidae**

*Amphidesma profunda* Conrad, App. in Morton, 1834, p. 8; Conrad, 1835a (Harris reprint 1893, p. 115, pl. 19, fig. 14); d'Orbigny, 1850, p. 377; Harris, 1895b, p. 36

*Semele profunda* (Conrad), Harris, 1919, p. 171, pl. 52, figs. 7, 8 specimen lost prior to 1937; Brann and Kent, 1960, p. 791; not Dall, 1900, p. 986 (= *Semele linosa claibornensis* Harris)

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Missing ANSP Moore, 1962, p. 89

*Semele profunda* Dall, 1900 not Conrad, 1833c

See *Semele linosa claibornensis* Harris

**Siliqua simondsi** Harris**Solenidae**

*Siliqua simondsi* Harris, 1895a, p. 51, pl. 3, fig. 2; Dall, 1900, p. 956; Harris, 1919, p. 196, pl. 59, fig. 4 copy Harris

*Range*.—? Upper Eocene. Jackson gr. (Harris, 1919)

*Locality*.—TEXAS: Brazos Co., Dr. Williams' Quarry, Stephenson's Headright (type)

*Type*.—Holotype, No. 35578 BEG

**Siliqua** ? sp.**Solenidae**

*Siliqua* ? sp. Gardner, 1935, p. 188

*Range*.—Paleocene. Mexia mem., Wills Point fm., upper Midway gr.

*Locality*.—TEXAS: Williamson Co., Little Dry Brushy Cr. on the Taylor-Beaukiss rd., 6 mi. S. of Thrall (USGS Sta. 10796)

*Type*.—Unfigured specimen not found USNM, 1962

**Sinodia (Sinodia) eocaenica** Stenzel and Krause**Veneridae**

*Meretrix trigoniata* Lea var. *bastropensis* Harris, Renick and Stenzel, 1931, p. 104 in part. loc. 1 only

*Sinodia (Sinodia) eocaenica* Stenzel and Krause, in Stenzel, Krause and Twining, 1957, p. 160, pl. 13, figs. 10, 11, text fig. 26

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

*Type*.—Holotype, No. 20671 BEG

*Solecardia (Spanorinus) alabamensis* (Cossmann)

See *Scintilla alabamensis* Cossmann

*Solecardia (Spanorinus) clarkeana* (Aldrich)

See *Scintilla clarkeana* Aldrich

*Solecortus Blainvillii* Lea

See *Gari (Gobraeus) blainvillii* (Lea)

See also *Gari eborea* (Conrad)

**Solemya alabamensis** Harris**Solemyidae**

*Solemya alabamensis* Harris, 1897b, p. 73, pl. 14, fig. 12; Harris, 1919, p. 76 in part, not pl. 26, fig. 16; Vokes, 1955, p. 540; Brann and Kent, 1960, p. 804 in part, not No. 630=*Solemya* sp.; Quenstedt, 1962, p. 39 in part

*Range*.—Lower Eocene. Bashi mem., (type), Hatchitigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Monroe Co.*, 4 mi. above Hamilton Bluff, Alabama R. (type)

*Type*.—Holotype, lost prior to 1937 PRI

*Solemya petricoloides* Clark

See cf. *Lithophaga marylandica* Clark and Martin; not *Byssomya petricoloides* Lea, 1833

**Solemya** sp.**Solemyidae**

*Solemya alabamensis* Harris, 1919, p. 76 in part, pl. 26, fig. 16; Brann and Kent, 1960, p. 804 in part, No. 630; Quenstedt, 1962, p. 39 in part

*Range*.—Middle Eocene. McBean fm., upper Claiborne gr.

*Localities*.—S.C.: *Orangeburg Co.*, 5 mi. N. of Orangeburg (Harris, 1919, p. 76); GA.: *Clay Co.*, Fort Gaines

*Type*.—Figured specimen, No. 630 PRI

*Solen lisbonensis* Aldrich

See *Eosolen lisbonensis* (Aldrich)

*Solen (Plectosolen) lisbonensis abruptus* Dall

See cf. *Eosolen lisbonensis abruptus* (Dall)

**Solen pendletonensis** Barry**Solenidae**

*Solen pendletonensis* Barry, 1942+, p. 72, pl. 9, fig. 10

*Range*.—Lower Eocene. Pendleton Ferry fm. (type), middle Wilcox [Sabine] gr.

*Localities*.—TEXAS: *Sabine Co.*,  $\frac{1}{4}$  mi. upstream from bridge over Sabine R. on La. Highway 6 (type). LA: *Natchitoches Par.*, hillside in extreme NE.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  NW.  $\frac{1}{4}$  sec. 9, T. 8 N., R. 9 W.; rd. cut along local rd. in NE.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  NE.  $\frac{1}{4}$  sec. 19, T. 9 N., R. 8 W.

*Type*.—Holotype, No. 5223 LSU Pal. Mus.

### **Solen sp.**

### **Solenidae**

*Solen lisbonensis* ? Aldrich, Clark and Martin, 1901, p. 165 in part, pl. 33, fig. 1

*Range*.—Lower Eocene, Nanjemoy fm.

*Localities*.—MD.: *Charles Co.*,  $\frac{1}{2}$  mi. below Chapel Point. VA.:

*King George Co.*, Woodstock

*Type*.—Figured specimen, JHU, 1962

*Solen* sp. Harris, 1897b

See *Eosolen lisbonensis* (Aldrich)

*Solena (Eosolen) lisbonensis* (Aldrich)

See *Eosolen lisbonensis* (Aldrich)

*Solena (Eosolen) lisbonensis abruptus* Dall

See *Eosolen lisbonensis abruptus* (Dall)

*Sphaerella anteproducta* Harris

See *Timothygnus anteproductus* (Harris)

*Sphaerella bulla* Conrad

See *Timothygnus bulla* (Conrad)

*Sphaerella inflata* (Lea)

See *Diplodonta (Diplodonta) inflata* (Lea)

*Sphaerella levis* (Conrad)

See *Diplodonta inflata* (Lea)

"*Sphaerella*" sp. Harris, 1897b, p. 65

See *Diplodonta hopkinsensis* Clark

### **Spisula albirupina** (Harris)

### **Mactridae**

*Mactra albirupina* Harris, 1894b, p. 155, pl. 6, fig. 2; Schuchert, *et al.*, 1905, p. 383

*Spisula albirupina* (Harris), Dall, 1898b, p. 896

*Mactra (Spisula) albirupina* Harris in Harris and Palmer, 1946, p. 109, pl. 23, figs. 11, 12; Wilbert, 1953, p. 98; Brann and Kent, 1960, p. 521

*Range*.—Upper Eocene. White Bluff fm. (type), lower Jackson gr.

*Locality*.—ARK.: *Jefferson Co.*, White Bluff, S. bank Arkansas R. (type)

*Types*.—Syntypes, No. 153773 USNM

### **Spisula decisa** (Conrad)

### **Pl. 3, fig. 2 Mactridae**

*Mactra decisa* Conrad, 1833c, p. 42; (Harris reprint, 1893, p. 68); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846b, p. 216, pl. 1, fig. 3 (not pl. 2 as in text); H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 375; Conrad, 1865a, p. 3; Conrad, 1866a, p. 8; Harris, 1895b, p. 14



*Macra decisa* Conrad sp. dub. de Gregorio, 1890, p. 228 in part, pl. 36, fig. 11 copy Conrad  
*Spisula decisa* (Conrad), Dall, 1898b, p. 896; Harris, 1919, p. 176, pl. 54, fig. 1; Brann and Kent, 1960, p. 814

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype (hinge fragment), No. 30583 ANSP Moore, 1962, p. 52

***Spisula decisa palmaris* Harris**

**Macridae**

*Spisula decisa palmaris* Harris, 1919, p. 176, pl. 54, figs. 2-6; Brann and Kent, 1960, p. 814

*Range*.—Middle Eocene. McBean fm., upper Claiborne gr.; Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type). S.C.: Orangeburg Co., 5 mi. N. of Orangeburg;

Calhoun Co., Keitt's [Kitts] Ravine, 4½ mi. NW. of Creston

*Types*.—Syntypes, Nos. 1252, 1253 PRI

***Spisula jacksonensis* Cooke**

**Macridae**

*Spisula jacksonensis* Cooke, 1926b, p. 137, figs. 14a-c

*Macra (Spisula) jacksonensis* Cooke, Harris and Palmer, 1946, p. 107, pl. 23, figs. 7-10; Brann and Kent, 1960, p. 522

*Range*.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: Hinds Co., Jackson, Moodys Branch (type)

*Type*.—Holotype, No. 353950 USNM

***Spisula mississippiensis* (Conrad) subsp.**

**Macridae**

*Macra mississippiensis* Conrad, var., Harris, 1897a, p. 471, pl. 18, fig. 6

Not *M. mississippiensis* Conrad, 1848a, p. 290; nor Conrad, 1848b, p. 121, pl. 12, fig. 14 Vicksburg Oligocene

Not *Spisula mississippiensis* (Conrad), Dall, 1898b, p. 896 Vicksburg Oligocene

*Spisula mississippiensis* (Conrad), Harris and Palmer, 1946, p. 106, pl. 23, fig. 2 same as 1897a

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

*Locality*.—MISS.: Hinds Co., Jackson

*Type*.—Figured specimen, ANSP

***Spisula parilis* (Conrad)**

**Macridae**

*Macra parilis* Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68, pl. 19, fig. 8); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846b, p. 217, pl. 1, fig. 6 (not pl. 2 as in text); H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 375; Conrad, 1865a, p. 3 as *Macra* ?; Conrad, 1866a, p. 8; Cossmann, 1893, p. 8; Harris, 1895b, p. 32

*Macra pygmaea* Lea, 1833, p. 44, pl. 1, fig. 11; Conrad, App. in Morton, 1834, p. 8=*M. parilis* Conrad; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 375 under *M. parilis* Conrad; Tuomey, 1858, p. 266; Harris, 1895b, p. 38

*Mactra* (*Cyrena* ?) *parilis* Conrad, de Gregorio, 1890, p. 227, pl. 36, figs. 1 copy Lea, 22 copy Conrad

*Mactra* (*Cyrena* ?) *parilis* Mut. *subcuneata* de Gregorio, 1890, p. 228, pl. 36, figs. 6-9; as Mut. *subtruncata* de Gregorio, 1890, p. 227, figs. 6-9; Mut. *subaequilatera*, pp. 227, 228, pl. 36, figs. 2-5; Harris, 1919, p. 201

*Spisula parilis* (Conrad), Dall, 1898b, p. 896; Harris, 1919, p. 174, pl. 53, figs. 2, 3, 3a; Brann and Kent, 1960, p. 814

*Mactra* (*Spisula*) *parilis* Conrad, Harris and Palmer, 1946, p. 106, pl. 23, figs. 3-6; Brann and Kent, 1960, p. 522

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes, No. 30720 ANSP Moore, 1962, p. 83

### ***Spisula parilis bistriata* (Harris)**

### **Mactridae**

*Mactra praetenuis* Conrad, Aldrich, 1886, p. 50 not Conrad, 1833c, p. 42  
*Mactra praetenuis* var. *bistriata* Harris, 1897b, p. 66 in part, pl. 13, fig. 10; Brann and Kent, 1960, p. 523

*Mactra bistriata* Harris, Harris, 1899b, p. 303, pl. 53, fig. 4

*Spisula parilis* var. *bistriata* (Harris), Harris, 1919, p. 174, pl. 53, fig. 4; Brann and Kent, 1960, p. 814

*Spisula parilis bistriata* (Harris), Barry, 1942+, p. 72, pl. 5, fig. 2

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox gr. Sabinetown fm., upper Wilcox [Sabine] gr.

*Localities*.—TEXAS: Sabine Co., Sabinetown Bluff, Sabine R.

ALA.: Monroe Co., 4 mi. above Hamilton Bluff, Alabama R.; Dale Co., Ozark (type)

*Type*.—Holotype, No. 178 PRI

### ***Spisula praetenuis* (Conrad)**

### **Mactridae**

*Mactra praetenuis* Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68, pl. 19, fig. 9); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846b, p. 217, pl. 1, fig. 4 (not pl. 2 as in text); H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 375; Harris, 1895b, p. 36; Dall, 1898b, p. 896

*Mactrella praetenuis* (Conrad), Conrad, 1865a, p. 4; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 228, pl. 36, fig. 10 copy Conrad; Cossmann, 1893, p. 8

*Spisula praetenuis* (Conrad), Dall, 1898b, p. 896; Harris, 1919, p. 175 in part, pl. 53, figs. 5 copy Conrad, figs. 6-8; Brann and Kent, 1960, p. 815

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes, (3) No. 20391 ANSP Moore, 1962 p. 89

### ***Spisula cf. praetenuis* (Conrad)**

### **Mactridae**

*Spisula praetenuis* (Conrad), Harris, 1919, p. 176 Montgomery, La.

*Mactra* (*Spisula*) *praetenuis* (Conrad), Harris and Palmer, 1946, p. 106 in part, pl. 23, fig. 1; Harris, 1951, p. 26 in part, pl. 13, figs. 10, 11 ?; Brann and Kent, 1960, p. 523

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.; Ocala gr.

*Localities*.—LA.: *Grant Par.*, Montgomery Ldg., Red R. ARK.: *St. Francis Co.*, Crow Cr.; *Jefferson Co.*, White Bluff, S. bank Arkansas R. FLA.: *Marion Co.*, Ocala Lime Rock Corp., quarry east side Highway 314, east of Kendrick. GA.: *Houston Co.*, 4 mi. from Perry; *Clay Co.*, Fort Gaines

*Types*.—Figured specimens, No. 4382 PRI, Montgomery, La.; Nos. 24527, 24528 PRI [omitted in Brann and Kent, 1960], Harris, 1951

***Spisula praetenuis australina* Harris**

**Mactridae**

*Spisula praetenuis* var. *australina* Harris, 1919, p. 175, pl. 53, figs. 9-12; Brann and Kent, 1960, p. 815

*Range*.—Middle Eocene. McBean fm (type), upper Claiborne gr.

*Locality*.—S.C.: *Orangeburg Co.*, Orangeburg District (type)

*Types*.—Syntypes, Nos. 1246-1250 PRI

*Spondylus amussiopse* de Gregorio

See *Plicatula filamentosa* Conrad

***Spondylus dumosus* (Morton)**

**Spondylidae**

*Plagiostoma dumosum* Morton, 1834, p. 59, pl. 16, fig. 8, text fig. p. 60; Conrad, App. in Morton, 1834, p. 6; Morton, 1842, p. 216 not Morton, 1840, p. 14 as in De Gregorio

*Lima dumosa* (Morton), d'Orbigny, 1850, p. 392

*Spondylus dumosus* (Morton), Conrad, 1865a, p. 14; Conrad, 1866a, p. 23; de Gregorio, 1890, p. 179 in subgenus *Plagiostoma*; Cossmann, 1893, p. 18; Dall, 1898b, p. 758; Hopkins, 1917, p. 299, pl. 27, fig. 5; Harris and Palmer, 1946, p. 25, pl. 6, figs. 2, 2a; Brann and Kent, 1960, p. 816

*Spondylus* (*Plagiostoma*) *dumosus* Morton, de Gregorio, 1890, p. 179  
*Lima* (*Plagiostoma*) *dumosum* Morton, Teppner, 1914, p. 31

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr. Lower Oligocene, Red Bluff beds (type)

*Localities*.—ALA.: *Clarke Co.*, St. Stephens Bluff, Tombigbee R. (type); *Choctaw Co.*, Melvin; Cocoa P.O. MISS.: *Wayne Co.*, Red Bluff [Hiwanee], Chickasawhay R.; *Clarke Co.*, Carsons Cr. near Shubuta

*Type*.—Holotype, lost ANSP, 1962

*Spondylus dumosus* (Morton), Aldrich, 1885c; 1886 as var.

See *Spondylus* sp.

***Spondylus hollisteri* Harris**

**Spondylidae**

*Spondylus hollisteri* Harris, 1951, p. 8, pl. 2, figs. 10, 11; pl. 3, figs. 1-4; Brann and Kent, 1960, p. 817

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr. (type)

*Locality*.—FLA.: *Marion Co.*, Ocala Lime Rock Corp. E. side of Highway 314, E. of Kendrick (type)

*Types*.—Holotype, No. 24445; paratypes, Nos. 24443, 24444, 24446 PRI

***Spondylus lamellacea* Kellum**

**Spondylidae**

*Spondylus lamellacea* Kellum, 1926, p. 21, pl. 2, figs. 7-9

*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.

*Localities*.—N.C.; *Pender Co.*, Northeast Cape Fear River, 3½ mi. above Castle Hayne Bridge (type); old Rocky Point; *New Hanover Co.*, Wilmington

*Types*.—Holotype, No. 353282; paratypes, Nos. 353297, 353251 USNM

**Spondylus sp.**

**Spondylidae**

*Spondylus* sp. Harris, 1919, p. 29

*Range*.—Middle Eocene, Cook Mt. fm., upper Claiborne gr.

*Locality*.—LA.: *Winn Par.*, Atlanta rd., 6 mi. W. of Winnfield

*Type*.—Specimen lost.

**Spondylus sp.**

**Spondylidae**

Not *Plagiostoma dumosum* Morton, Conrad, 1835a, p. 34 as in Harris, 1897b, p. 42; cf. Conrad, 1835b, p. 336

*Spondylus dumosus* (Morton), Aldrich, 1885c, p. 305. Not *S. dumosus* Morton, 1834, p. 39

*Spondylus dumosus* (Morton) var., Aldrich, 1886, p. 50

*Spondylus* sp. Harris, 1897b, p. 42, pl. 6, fig. 11; Brann and Kent, 1960, p. 817

*Range*.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: *Washington Co.*, Hatchetigbee Bluff, Tombigbee R.; *Dale Co.*, Ozark, R.R. cut just beneath the "Buhrstone"

*Type*.—Figured specimen, Harris, No. 221 PRI

**Sportella alabamensis** (Aldrich)

**Sportellidae**

*Lepton ? alabamensis* Aldrich, 1897a, p. 16, pl. 5, fig. 9

*Sportella alabamensis* (Aldrich), Dall, 1899, p. 882; Dall, 1900, pp. 1126, 1140; Harris, 1919, p. 106, pl. 37, fig. 4 copy Aldrich

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Washington Co.*, Bakers Bluff, ½ mi. above St. Stephens, Tombigbee R. (type)

*Type*.—Holotype, No. 639003 USNM

**Sportella ? divaricata** (Johnson)

**Sportellidae**

*Linearia ? divaricata* Johnson, 1904, p. 143, text fig.

Because the hinge is not available, the range of the genus *Linearia* Conrad, 1860 is Cretaceous, and the figure of this species does not appear too close to *Linearia*, we are questionably inserting the species in *Sportella* Deshayes, 1858, p. 593

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

*Locality*.—TEXAS: *Cherokee Co.*, Berryman's place, 2 mi. NE. of Alto (type) [see Stenzel, Krause, and Twining, 1957, p. 147]

*Type*.—Holotype, Lea Coll. ANSP (Acc. No. 9706)

**Sportella gregorioi** Cossmann

**Sportellidae**

*Sportella Gregorioi* Cossmann, 1893, p. 11, pl. 1, figs. 11, 12; Aldrich, 1897a, p. 7, pl. 5, fig. 4; Dall, 1899, p. 882; Dall, 1900, p. 1126; Harris, 1919, p. 105, pl. 37, figs. 3, 3a copies Cossmann; fig. 3b copy Aldrich

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.; *Monroe Co.*, Claiborne Bluff, Alabama R., (type); *Clarke Co.*, "sand bed at W. Pughs" (Aldrich)

*Type*.—Holotype, No. 11641 Lab. Géol., Sorbonne, Paris

***Sportella oblonga* (Aldrich)**

**Sportellidae**

*Fabella oblonga* Aldrich, 1897a, p. 16, pl. 5, figs. 2a 2a

"*Fabella*" *oblonga* Aldrich, Harris, 1897b, p. 58, pl. 11, figs. 7, 8 copy Aldrich

*Sportella oblonga* (Aldrich), Dall, 1899, p. 882; Dall, 1900, p. 1126

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Choctaw Corner (type) [not Woods Bluff as in Dall]

*Type*.—Specimen labeled type is in USNM, but it is not the figured specimen *vide* D. Wilson, 1962

*Stalagmium margaritaceum* Conrad

See *Crenella margaritacea* (Conrad)

**Cf. *Striarca harrisi* (Sheldon)**

**Arcidae**

*Arca inornata* Meyer, 1886b, p. 79, pl. 1, fig. 24; de Gregorio, 1890, p. 197, pl. 24, fig. 29 copy Meyer; Not Meek and Hayden, 1858, p. 51 (=? Silurian, Nebraska)

*Arca* (*Fossularca* ?) *inornata* Meyer, Cossmann, 1893, p. 17; Dall, 1898b, p. 658

*Arca harrisi* Sheldon, 1917, p. 21, pl. 4, fig. 15 copy Meyer, new name for *A. inornata* Meyer; Harris, 1919, p. 56, pl. 22, fig. 21 copy Meyer

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638849 USNM

***Striarca stearnsii* (Gardner)**

**Arcidae**

*Breviarca stearnsii* Gardner, 1935, p. 131, pl. 6, figs. 9, 10

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.

*Locality*.—TEXAS; *Travis Co.*, USGS Sta. 5282, clay from bluff at Webberville (type)

*Type*.—Holotype, No. 373167 USNM

*Syndesmya* [sic] *tellinula* (Conrad)

See *Abra* (*Abra*) *nitens* (Lea)

*Syndesmya linosa* (Conrad)

See *Semele linosa* (Conrad)

*Taras hopkinsensis* (Clark)

See *Diplodonta hopkinsensis* Clark

*Tellina albaria* Conrad, 1865b, not Conrad, 1849

See *Tellina spillmani* Dall



**Tellina aldrichi** Dall**Tellinidae**

*Tellina* (*Moerella* ?) *aldrichi* Dall, 1900, p. 1017 in part, pl. 46, fig. 9; Schuchert, *et al.*, 1905, p. 642

*Tellina aldrichi* Dall, Harris, 1919, p. 160, pl. 49, fig. 12 copy Dall

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R. (type); [? Greggs Ldg., Alabama R.; Bells Ldg., Alabama R., Dall]

*Type*.—Holotype, No. 90948 USNM

**Tellina alta** ConradPl. 3, fig. 6 **Tellinidae**

*Tellina alta* Conrad, 1833c, p. 41 (Harris reprint, 1893, p. 67); Conrad, App. in Morton, 1834, p. 7; not *T. alta* Conrad, 1837, p. 258; Conrad, 1846c, p. 399, pl. 4, fig. 10; H. C. Lea, 1849, p. 106; Harris, 1895b, p. 4; Harris, 1919, p. 167, pl. 50, fig. 22 copy Conrad  
*Arcopagia alta* (Conrad), d'Orbigny, 1850, p. 376; Cossmann, 1893, p. 9  
*Tellina* (*Arcopagia*) *alta* Conrad, Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; de Gregorio, 1890, p. 225, pl. 35, fig. 30 copy Conrad; Dall, 1900, p. 1015

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Types*.—Syntypes (3), No. 30527 ANSP Moore, 1962, p. 36

**Tellina bellsiana** Aldrich**Tellinidae**

*Tellina bellsiana* Aldrich, 1921, p. 17, pl. 2, figs. 15, 16; Barry, 1942+, p. 70, pl. 9, fig. 12

*Range*.—Lower Eocene. Bells Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine gr.]; Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.; Pendleton Ferry fm., middle Wilcox [Sabine] gr.

*Localities*.—ALA.: *Monroe Co.*, Bells Ldg., Alabama R.; Greggs Ldg., Alabama R. (type), *vide* list types Ala. Mus. LA.: For locations in *Sabine Par.* see Barry, 1942+, p. 71

*Type*.—Holotype, No. 57 GSATC

**Tellina cherokeensis** Harris**Tellinidae**

*Tellina cherokeensis* Harris, 1919, p. 165, pl. 50, figs. 19, 20; Brann and Kent, 1960, p. 839

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

*Locality*.—TEXAS: *Cherokee Co.*, W. H. Berryman's place, 11 mi. from Rusk and 2.5 from Linwood (type) (Stenzel, Krause, and Twining, 1957, p. 147)

*Types*.—Syntypes, Nos. 1226, 1227 PRI

**Tellina cossmanni** Dall**Tellinidae**

*Tellina nitens* de Gregorio, 1890, p. 223, pl. 35, figs. 13-16; Cossmann, 1893, p. 8 under *Tellina nitens* Lea, 1833; Dall, 1900, p. 1015 not yg. of *Diplodonta unguina* as stated

*Tellina cossmanni* Dall, 1900, p. 997; Harris, 1919, p. 164, pl. 50, figs. 13-16 copies De Gregorio

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost.

***Tellina cynoglossa* Dall**

**Tellinidae**

*Tellina cynoglossa* Dall, 1900, p. 1017, pl. 46, fig. 27; Schuchert, *et al.*, 1905, p. 643; Aldrich, 1921, p. 17

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

*Type*.—Holotype, No. 154537 USNM

***Tellina cynoglossula* Harris**

**Tellinidae**

*Tellina cynoglossula* Harris, 1919, p. 161, pl. 49, figs. 15, 16

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Washington Co., Gopher Hill, Tombigbee R. (type)

*Types*.—Syntypes, No. 559280 USNM

***Tellina eburneopsis* Conrad**

**Pl. 2, fig. 2 Tellinidae**

*Tellina (Angulus) eburneopsis* Conrad, 1865b, p. 138, pl. 10, fig. 17

*Tellina eburneopsis* ? Conrad, Meyer, 1887b, p. 54, pl. 3, figs. 15, 15a

*Tellina (Arcopagia) eburneopsis* Conrad, Dall, 1900, p. 1015

*Tellina eburneopsis* Conrad, Conrad, 1866a, p. 24; Harris, 1897a, p. 471, pl. 18, fig. 6; Harris and Palmer, 1946, p. 100, pl. 21, figs. 19, 20; Brann and Kent, 1960, p. 840

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Localities*.—MISS.: Clark Co., "Enterprise" [error] Garland Cr. (type), see Aldrich, 1885c, p. 307; Hinds Co., Jackson, ARK.:

Cleveland Co. LA.: Caldwell Par., Bunker Hill Ldg., Ouachita R.

*Type*.—Holotype, No. 13218 ANSP Moore, 1962, p. 57

***Tellina (Angulus) entaenia* Dall**

**Tellinidae**

*Tellina (Angulus) entaenia* Dall, 1900, p. 1016, p. 1216 Index *eutaenia* [sic], pl. 46, fig. 2 *eutaenia* [sic]; Schuchert, *et al.*, 1905, p. 644 as

*eutaenia*; Harris, 1919, p. 162, pl. 50, fig. 2 copy Dall

Although the spelling of the specific name was spelled *eutaenia* in three instances we are retaining the spelling as in the text.

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 137391 USNM

***Tellina (Angulus) entaenia equator* Harris**

**Tellinidae**

*Tellina (Angulus) entaenia equator* Harris, 1919, p. 162, pl. 50, fig. 1; Brann and Kent, 1960, p. 840

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 1223 PRI

**Tellina estellensis Aldrich****Tellinidae**

*Tellina* [sp.] Harris, 1896, p. 68, pl. 6, fig. 8; Brann and Kent, 1960, p. 843

*Tellina estellensis* Aldrich, 1921, p. 17, pl. 2, figs. 13, 14

*Tellina estellensis* Aldrich, Barry, 1942+, p. 70, pl. 9, fig. 3; pl. 10, fig. 1

*Range*.—Paleocene. Sucarnoochee cl. (type) [Porters Creek fm.], upper Midway gr.; "Logansport fm." (name preoccupied), middle Midway gr. (Barry)

*Localities*.—TENN.: Hardeman Co., Hannah's, 1¾ mi. N. of Crainesville. ALA.: Wilcox Co., near Estelle (type). LA.: For localities in Sabine Par., Natchitoches Par. and De Soto Par. see Barry

*Type*.—Holotype, No. 64 GSATC

**Tellina greggi Harris****Tellinidae**

*Tellina lignitica* Harris, 1897a, p. 477 name used in text

*Tellina greggi* Harris, 1897a, pl. 22, figs. 3, 3a. Name used in expl. pl. for same as in text. The question would be which name has priority, the one of the description or the one on the plate. In this case Harris used *greggi* the second time as did Dall so that it is less confusing to retain the name *greggi* for the species.

*Tellina greggi* Harris, Harris, 1897b, p. 72 in part not *T. virginiana*, pl. 14, figs. 9a-d; Brann and Kent, 1960, p. 840

*Tellina* (*Moerella*) *Greggi* Harris (not *T. virginiana*, Clark, 1895); Dall, 1900, p. 1015

*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Localities*.—ALA.; Wilcox Co., Yellow Bluff, Alabama R.; Monroe Co., Greggs Ldg., Alabama R. (type)

*Types*.—Syntypes, ANSP

*Tellina greggi* Harris, Harris, 1897b, p. 72 in part

See *Tellina* (*Angulus*) *virginiana* Clark

**Tellina leana Dall****Tellinidae**

*Egeria ovalis* Lea, 1833, p. 54, pl. 1, fig. 25 (not fig. 24 as in text and on expl. pl.); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; Cossmann, 1893, p. 9 footnote; Harris, 1895b, p. 31. Not "*Tellina ovalis* Sowerby, 1825" as in Dall, 1900. G. B. Sowerby I, 1825a, p. 3, App. = *Tellinides ovalis*. Not *Tellina ovalis* S. Woodward, 1833, p. 43 preoccupies *Egeria ovalis* Lea, 1833, Dec. = *Tellina*

*Tellina ovalis* (Lea), Conrad, App. in Morton, 1834, p. 7; d'Orbigny, 1850, p. 377; Cossmann, 1893, p. 8

*Tellina* (*Peronaeoderma*) *ovalis* (Lea), Conrad, 1865a, p. 5; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 224 in part, not pl. 35, fig. 34 copy *Tellina plana* (Lea)

*Donax plana* (Lea), de Gregorio, 1890, p. 221 in part, pl. 35, fig. 3 copy *Tellina ovalis* (Lea); not figs. 1, 2 = *Tellina plana* (Lea)

*Tellina* (*Moerella*) *Leana* Dall, 1900, p. 1015 new name for *Tellina ovalis* (Lea)

*Tellina leana* Dall, Harris, 1919, p. 163, pl. 50, figs. 4-6; Brann and Kent, 1960, p. 840

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.  
*Localities*.—ALA.: Monroe Co., Claiborne Bluff, base of bluff; Gosport sd. bed (type), Alabama R.  
*Type*.—Holotype, No. 5135 Lea Coll. ANSP (Harris Cat. 1895c)

**Tellina leana praegravis Harris****Tellinidae**

*Tellina leana praegravis* Harris, 1919, p. 164, pl. 50, figs. 10-12

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.  
*Locality*.—S.C.: Calhoun Co., Keitts Ravine [Kitt's],  $4\frac{1}{2}$  mi. NW. of Creston (type)  
*Types*.—Missing, USNM prior to 1962

**Tellina leana sabotica Harris****Tellinidae**

*Tellina leana sabotica* Harris, 1919, p. 164, pl. 50, figs. 8, 9

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.  
*Locality*.—S.C.: Calhoun Co., Keitts Ravine [Kitt's],  $4\frac{1}{2}$  mi. NW. of Creston (type)  
*Types*.—Missing, USNM prior to 1962

**Tellina leana yeguana Harris****Tellinidae**

*Tellina leana yeguana* Harris, 1919, p. 164, pl. 50, fig. 7

*Range*.—Middle Eocene. Yegua fm. (type), uppermost Claiborne gr. *vide* Patterson, 1942  
*Locality*.—TEXAS: Lee Co., W. Yegua Cr. (type)  
*Type*.—Lost, *vide* Rodda, 1963

*Tellina lignitica* Harris

See *Tellina greggi* Harris

**Tellina linifera Conrad****Tellinidae**

*Tellina (Tellinella) linifera* Conrad, 1865b, p. 138, pl. 10, figs. 16, 18; Harris and Palmer, 1946, p. 99, pl. 21, figs. 15-18; Brann and Kent, 1960, p. 841

*Tellina linifera* Conrad, Conrad, 1866a, p. 24; Harris, 1894b, p. 154; Dall, 1900, p. 1015

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Localities*.—MISS.: Clarke Co., "Enterprise" [error] Garland Cr. (type); see Aldrich, 1885c, p. 307;  $1\frac{1}{2}$  mi. above Shubuta on Chickasawhay R.; Hinds Co., Jackson, Town Cr. LA.: Grant Par., Montgomery Ldg., Red R. ARK.: Cleveland Co., Vince Ferry, Saline R. ALA.: Clarke Co., Little Stave Cr.

*Types*.—Syntypes (2), Nos. 13229 ANSP Moore, 1962, p. 71

**Tellina makelloides Gardner****Tellinidae**

*Tellina makelloides* Gardner, 1927, p. 374, figs. 41, 42

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.  
*Locality*.—TEXAS: Anderson Co.,  $\frac{3}{4}$  mi. S. of Elkhart (type)  
*Type*.—Holotype, No. 369246 USNM

**Tellina (Eurytellina) mooreana Gabb****Tellinidae**

*Tellina Mooreana* Gabb, 1860d, p. 387, pl. 67, fig. 56; Conrad, 1865a, p. 4; Heilprin, 1891a, p. 401; Gardner in ? Trowbridge, 1923, p. 95; Gardner, 1945, p. 106



*Tellina* (*Peronidia* ?) *papyria* Conrad, (*T. mooreana* Gabb) Dall, 1900, p. 1015 in part

*Tellina papyria* Conrad, Harris, 1919, p. 159 in part, pl. 49, fig. 10 var. *mooreana*, not figs. 7-9a, 11; Deussen, 1924, p. 67. Not Conrad, 1833c, p. 41

*Tellina papyria* Conrad var. *mooreana* Gabb, Renick and Stenzel, 1931, p. 104

*Tellina* (*Eurytellina*) *mooreana* Gabb, Stenzel, Krause, and Twining, 1957, p. 121, pl. 15, figs. 5, 6, 9, 10

*Range*.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.; Stone City beds, middle Claiborne gr.

*Localities*.—TEXAS; "Caldwell Co.", Gabb (type)=*Burleson Co.*, Stone City Bluff, Brazos R. *fide* Stenzel, Krause, and Twining, 1957, p. 11; Cedar Cr. (Harris); *Brazos Co.*, Little Brazos R.; *Cherokee Co.* (Harris); *Gonzales Co.*, (Harris)

*Type*.—Holotype, No. 13260 ANSP (*fide* Stenzel, Krause, and Twining, 1957)

*Tellina nitens* (Lea)

See *Abra* (*Abra*) *nitens* (Lea)

*Tellina nitens* de Gregorio not Lea

See *Tellina cossmanni* Dall

*Tellina ovalis* (Lea)

See *Tellina leana* Dall

#### ***Tellina* (*Eurytellina*) *papyria* Conrad**

#### **Tellinidae**

*Tellina papyria* Conrad, 1833c, p. 41 (Harris reprint, 1893, p. 67); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 399, pl. 4, fig. 7; H. C. Lea, 1849, p. 106; d'Orbigny, 1850, p. 377; Conrad, 1865a, p. 4; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 224, pl. 35, fig. 32; Cossmann, 1893, p. 9; Harris, 1895b, p. 32; Harris, 1919, p. 159 in part, pl. 49, figs. 7-9a, 11 not fig. 10; Brann and Kent, 1960, p. 842

*Tellina* (*Peronidia* ?) *papyria* Conrad, Dall, 1900, p. 1015 in part, not *mooreana*

*Tellina* (*Eurytellina*) *papyria* Conrad, Stenzel, Krause, and Twining, 1957, p. 122, pl. 15, figs. 7, 8

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon gr.] (type) upper Claiborne gr.; McBean fm., upper Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type), Lisbon Bluff, Alabama R.; Hamilton Bluff, Alabama R. MISS.: *Clark Co.*, Wautubbee. S.C.: *Orangeburg Co.*, 5 mi. W. of Orangeburg

*Type*.—Probable holotype, No. 30528 ANSP Moore, 1962, p. 83

*Tellina papyria* of authors not Conrad, 1833c

See *Tellina* (*Eurytellina*) *mooreana* Gabb

*Tellina papyria mooreana* Gabb

See *Tellina mooreana* Gabb

#### ***Tellina pearlensis* Meyer**

#### **Tellinidae**

*Tellina pearlensis* Meyer, 1887a, [no page], pl. 2, fig. 3; Harris and Palmer, 1946, p. 104, pl. 22, fig. 18 copy Meyer

Although this species was figured by Meyer it was not described nor the locality of occurrence indicated. The type is available and labeled from Jackson, Miss.



*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Jackson (label with type)

*Type*.—Holotype, No. 638894 USNM

*Tellina perovata* Conrad, 1865a, p. 4, Conrad, 1866a, p. 8=Oligocene, not Claiborne Eocene as in 1865a or Alabama as 1866a

***Tellina (Moerella) petropolitana* Stenzel and Krause**

**Tellinidae**

*Tellina (Moerella) petropolitana* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 123, pl. 22, figs. 10, 11

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Locality*.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

*Type*.—Holotype, No. 20592 BEG

***Tellina (Angulus) plana* (Lea)**

**Tellinidae**

*Egeria plana* Lea, 1833, p. 54, pl. 1, fig. 24 (not fig. 25 as in text and expl. pl.); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 35

*Tellina plana* (Lea), Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 400, pl. 4, fig. 6; H. C. Lea, 1849, p. 106; Conrad, 1865a, p. 4; Conrad, 1866a, p. 8

*Tellina subplana* d'Orbigny, 1850, p. 377 new name

*Donax plana* (Lea), de Gregorio, 1890, p. 221, pl. 35, figs. 1, 2; fig. 11 copy Conrad; fig. 34 copy Lea not *ovalis* as in De Gregorio, not fig. 3 copy *ovalis* Lea

*Tellina (Angulus) plana* (Lea), Dall, 1900, p. 1016

*Egerella plana* (Lea), Cossmann, 1893, p. 9 footnote

*Tellina (Angulus) subplana* d'Orbigny, Harris, 1919, p. 163, pl. 50, fig. 3 copy Lea

This binomen *Tellina plana* Lea (as *Egeria*) is not preoccupied by *Trigonella plana* da Costa, 1778, p. 200, changed to *Tellina* by Donovan, 1801, pl. 64, fig. 1. Therefore, the new name *Tellina subplana* d'Orbigny, 1850 was not necessary as stated by Dall, 1900, and used by Harris, 1919. Da Costa's species is placed in *Scrobicularia piperata* Gmelin, Forbes and Hanley, 1848, p. 326

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5139 ANSP (Harris Cat. 1895c)

***Tellina (Angulus) prolenta* Aldrich**

**Tellinidae**

*Tellina (Angulus) prolenta* Aldrich, 1911, p. 4, pl. 1, fig. 5 (as *Angelus*); Harris, 1919, p. 162, pl. 49, fig. 17 copy Aldrich

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 639114 USNM

***Tellina quihi* Gardner**

**Tellinidae**

*Tellina quihi* Gardner, 1935, p. 187, pl. 16, fig. 12

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: Medina Co., 5.7 mi. NW. of Castroville on the Quihi rd. (type)

*Type*.—Holotype, No. 370924 USNM

**Tellina (Arcopagia) raveneli Conrad**

**Tellinidae**

*Tellina Raveneli* Conrad, App. in Morton, 1834, p. 7 *nomen nudum*; Conrad, 1846c, p. 400 (no pl. 5, fig. 1 as in text); H. C. Lea, 1849, p. 106 as [*Ravenelli*]; d'Orbigny, 1850, p. 377; Harris, 1895b, p. 39; Harris, 1919, p. 167, pl. 51, figs. 1-5; Brann and Kent, 1960, p. 843

*Tellina (Arcopagia) Raveneli* Conrad, Conrad, 1865a, p. 5; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 225; Dall, 1900, p. 1016

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; McBean fm., upper Claiborne gr.

*Localities*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R.; base of Claiborne Bluff, Alabama R. (type). S.C.: Orangeburg Co., Orangeburg District

*Types*.—Probable syntypes (2), No. 30582 ANSP Moore, 1962, p. 92

**Tellina (Arcopagia) raveneli weisbordi Harris**

**Tellinidae**

*Tellina (Arcopagia) raveneli weisbordi* Harris in Harris and Palmer, 1946, p. 104, pl. 22, fig. 19; Brann and Kent, 1960, p. 843

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—LA.: Grant Par., Montgomery, Red R. (type)

*Type*.—Holotype, No. 4378 PRI

**Tellina santander Gardner**

**Tellinidae**

*Tellina* sp. A. Gardner, 1923, p. 113 in part, pl. 32, not fig. 9 as *fide* Gardner, 1945, p. 105; fig. 8 *fide* D. Wilson, per com., 6/16/62

*Tellina santander* Gardner, 1945, p. 105, pl. 4, fig. 12 same description (*verbatim*) as 1923, p. 113

*Range*.—Middle Eocene. Laredo fm. (type), upper Claiborne gr.

*Localities*.—TEXAS: Zapata Co., Rio Grande at Rancho La Perla, 4 mi. S. of Webb Co. line (type) USGS sta. 6436. For Mexican localities see Gardner, 1945, p. 106

*Type*.—Holotype, No. 352271 USNM

*Tellina scandula* Conrad

See *Macoma scandula* (Conrad)

**Tellina semipapyria Aldrich**

**Tellinidae**

*Tellina semipapyria* Aldrich, 1921, p. 18, pl. 2, fig. 18

*Tellina* sp. cf. *Tellina semipapyra* [sic] Barry, 1942+, p. 72

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.; Sabinetown fm., upper Wilcox [Sabine] gr. (Barry)

*Localities*.—ALA.: Wilcox Co., "Jacksons Rock House Branch" (type)—Rock House Cr., SW. Wilcox Co. in secs. 11 and 15, T. 11 N., R. 4 E. (La Moreaux and Toulmin, 1959); Clarke Co., Woods Bluff, Tombigbee R. Cf. TEXAS; Sabine Co., Sabinetown, Sabine R.

*Type*.—Holotype, No. 36 GSATC

**Tellina semirotonda Aldrich****Tellinidae**

*Tellina semirotonda* Aldrich, 1921, p. 18, pl. 2, fig. 17

*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.; Bells Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.

*Localities*.—ALA.; Monroe Co., Greggs Ldg., Alabama R. (type); Bells Ldg., Alabama R.

*Types*.—Syntypes, No. 58 GSATC

*Tellina sillimani* Conrad

See *Macoma sillimani* (Conrad)

**Tellina spillmani Dall****Pl. 2, fig. 1 Tellinidae**

*Tellina (Angulus) albaria* Conrad, 1865b, p. 138, pl. 11, fig. 7; Conrad, 1866a, p. 24 (not p. 7=Oregon). Not *T. albaria* Conrad, 1849, p. 725; Dall reprint, 1909, p. 154

*Tellina (Arcopagia?) spillmani* Dall, 1900, p. 1015. New name for *T. albaria* Conrad, 1865b, p. 138

*Tellina spillmani* Dall, Harris and Palmer, 1946, p. 104, pl. 22, fig. 20 copy Conrad

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Locality*.—MISS.: Clarke Co., Garland Cr. (type) ["Enterprise" error. See Aldrich, 1885c, p. 307]

*Type*.—Possible holotype *Tellina albaria* Conrad, No. 13219 ANSP Moore, 1962, p. 35

**Tellina (Arcopagia) spillmani corvia Harris****Tellinidae**

*Tellina (Arcopagia) spillmani* var. *corvia* Harris in Harris and Palmer, 1946, p. 105, pl. 22, fig. 21; Brann and Kent, 1960, p. 844

*Range*.—Upper Eocene. Upper Jackson gr. (type)

*Locality*.—ARK.: St. Francis Co., at Highway 70 bridge over Crow Cr., 2 mi. E. of Forrest City (type)

*Type*.—Holotype, No. 4379 PRI

**Tellina subequalis Conrad****Tellinidae**

*Tellina subequalis* Conrad, 1848a, p. 298; Conrad, 1848b, p. 129, pl. 14, fig. 8; Harris, 1919, pp. 71, 161 suggests internal mold of *T. papyria*; Dall, 1900, p. 1016

*Tellina (Arcopagia) subequalis* Conrad, Conrad, 1865a, p. 5; Conrad, 1866a, p. 8

*Range*.—Middle Eocene. Age undetermined

*Locality*.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

*Type*.—Missing ANSP Moore, 1962, p. 98

*Tellina subfilosa* d'Orbigny

See *Garum filosa* (Conrad)

*Tellina subplana* d'Orbigny

See *Tellina plana* (Lea)

**Tellina subtriangularis** Aldrich**Tellinidae**

*Tellina subtriangularis* Aldrich, 1895b, p. 18, pl. 5, figs. 8, 8a; Harris, 1897b, p. 73 in part, pl. 14, figs. 11a-c; Brann and Kent, 1960, p. 844  
*Tellina (Angulus) subtriangularis* Aldrich, Dall, 1900, p. 1016 [not *T. williamsi* Clark, 1895 *vide* Dall]

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: *Washington Co.*, Hatchetigbee Bluff, Tombigbee R., (type); *Clarke Co.*, Woods Bluff, Tombigbee R.; *Monroe Co.*, 4 mi. above Hamilton Bluff, Alabama R.; *Dale Co.*, Ozark

*Type*.—Holotype, No. 638967 USNM

*Tellina subtriangularis* Aldrich, Harris, 1897b

See also *T. williamsoni* Clark

**Tellina tallicheti** Harris**Tellinidae**

*Tellina tallicheti* Harris, 1895a, p. 51, pl. 3, fig. 1; Harris, 1919, p. 158, pl. 49, figs. 3-5; Brann and Kent, 1960, pp. 844, 845

*Tellina (Arcopagia) tallicheti* Harris, Dall, 1900, p. 1016

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.; Cook Mt. fm. upper Claiborne gr.; McBean fm., upper Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type). ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R. S.C.: *Orangeburg Co.*, 6 mi. NW. of Orangeburg

*Type*.—Holotype, No. 1215 PRI

**Tellina temperata** Aldrich**Tellinidae**

*Tellina temperata* Aldrich, 1911, p. 4, pl. 1, fig. 6

*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type)

*Type*.—Holotype missing USNM 1962; not in GSATC, 1962

**Tellina (Arcopagia) trumani** Harris**Tellinidae**

*Tellina (Arcopagia) trumani* Harris, 1897b, p. 73, pl. 12, fig. 15; pl. 14, figs. 10, 10a; Dall, 1900, p. 1016; Brann and Kent, 1960, p. 845

*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type)

*Types*.—Syntypes, Nos. 170, 230, 231 PRI

**Tellina trumani australina** Harris**Tellinidae**

*Tellina trumani* var. *australina* Harris, 1919, p. 159, pl. 49, figs. 6, 6a; Brann and Kent, 1960, p. 845

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: *Orangeburg Co.*, Orangeburg district (type)

*Type*.—Holotype, No. 1217 PRI

***Tellina trumani garlandica* Harris****Tellinidae**

*Tellina trumani* var. *garlandica* Harris in Harris and Palmer, 1946, p. 100, pl. 22, figs. 1-3; Brann and Kent, 1960, p. 845

*Range*.—Upper Eocene. Lower Jackson gr. (type)

*Locality*.—MISS.: *Clarke Co.*, Garland Cr., near Shubuta (type)

*Type*.—Holotype, No. 4363 PRI

***Tellina vauhani* Cooke****Tellinidae**

*Tellina vauhani* Cooke, 1926b, p. 138, figs. 16a-b; Harris and Palmer, 1946, p. 102 description corrected, pl. 22, figs. 13-16; Brann and Kent, 1960, p. 845

*Range*.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Moodys Branch, Jackson (type);

*Clarke Co.*, Garland Cr. ALA.: *Washington Co.*, Gopher Hill

(Baker's Bluff), Tombigbee R.

*Type*.—Holotype, No. 353952 USNM

***Tellina vauhani* Cooke variation****Tellinidae**

*Tellina vauhani* Cooke "var." Harris and Palmer, 1946, p. 103, pl. 22, fig. 17; Brann and Kent, 1960,, p. 846

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Moodys Branch, Jackson

*Type*.—Figured specimen, No. 4377 PRI

*Tellina Vicksburgensis* Conrad, Meyer, 1885b in part

See *Tellina vicksburgensis moodiana* Cooke

***Tellina vicksburgensis moodiana* Cooke****Tellinidae**

*Tellina vicksburgensis* var. *robusta* Meyer, 1885a, p. 461. Not *T. robusta* Hanley, 1844, p. 63

*Tellina Vicksburgensis* Conrad, Meyer, 1885b, p. 72 in part

*Tellina vicksburgensis* var. *moodiana* Cooke, 1926b, p. 137, figs. 15a, b; Harris and Palmer, 1946, p. 101, pl. 22, figs. 4-8; Brann and Kent, 1960, p. 846

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Moodys Branch, Jackson (type)

*Type*.—Holotype, No. 353951 USNM

***Tellina (Angulus) virginiana* Clark****Tellinidae**

*Tellina virginiana* Clark, 1895, p. 5; Clark, 1896, p. 76, pl. 15, fig. 4

*Tellina greggi* Harris, 1897b, p. 72 in part

*Tellina (Angulus) virginiana* Clark, Dall, 1900, pp. 1015, 1016; Clark and Martin, 1901, p. 166, pl. 33, fig. 3 [misspelled *Angelus*]

*Range*.—Paleocene. Aquia fm. (type probably). Lower Eocene. Nanjemoy fm. (larger casts)

*Localities*.—MD.: *Charles Co.*, Popes Cr.; E. and W. of Port Tobacco; 2½-3 mi. above Popes Cr.; Clifton Beach; 1 mi. SE. of Mason Springs; *Prince Georges Co.*, Charles Branch between Rosaryville and Upper Marlboro; Fort Washington. VA.: *King George Co.*, Woodstock; 2 mi. below Potomac Cr.; *Stafford Co.*, Aqui Cr.; [*Hanover ?*] *Co.*, Hanoverville

*Type*.—Holotype, USNM



**Tellina williamsi** Clark**Tellinidae**

*Tellina williamsi* Clark, 1895, p. 5; Clark, 1896, p. 76, pl. 15, figs. 3a, 3b

*Tellina subtriangularis* Aldrich, Harris, 1897b, p. 73 in synonymy

*Tellina* (*Peronidia* ?) *Williamsi* Clark, Dall, 1900, p. 1016; Clark and Martin, 1901, p. 167, pl. 33, figs. 2, 2a

*Range*.—Paleocene. Aquia fm. (type). Lower Eocene, Nanjemoy fm.

*Localities*.—MD.: Charles Co., Popes Cr.; 2½ mi. above Popes Cr.  
VA.: Stafford Co., Potomac Cr. (type); King George Co., Woodstock

*Type*.—Holotype, USNM

*Tellina* sp.

See *Tellina estellensis* Aldrich

**Tellina** sp.**Tellinidae**

*Tellina* sp. Harris, 1919, pp. 161, 162, pl. 49, figs. 13, 14; pl. 50, fig. 21; Brann and Kent, 1960, p. 844

*Range*.—Middle Eocene. McBean fm., upper Claiborne gr.

*Locality*.—GA.: Clay Co., Fort Gaines

*Types*.—Figured specimens, Nos. 1221, 1222, 1228 PRI

**Tellina** sp. A.**Tellinidae**

*Tellina* sp. A. Gardner, 1923, p. 113 in part, pl. 32, fig. 9 only; fig. 8 = *T. santander* Gardner, 1945, p. 105. See *T. santander*.

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Localities*.—TEXAS: Webb Co., 4 mi. SE. of Laredo; 1 mi. W. of Canada Verde ranch; Zapata Co., 3½ mi. above San Ygnacio; Lopeño post office

*Type*.—Figured specimen, No. 352270 USNM

**Tellina** sp.**Tellinidae**

*Tellina* sp. Gardner, 1935, p. 187

*Range*.—Paleocene. Midway gr.

*Locality*.—TEXAS: Medina Co., 5.7 mi. NW. of Castroville (USGS Sta. 11769)

*Type*.—Unfigured specimen not found USNM, 1962

**Tellina** sp.**Tellinidae**

*Tellina* sp. Gardner, 1935, p. 188

*Range*.—Paleocene. Wills Point fm., upper Midway gr.

*Locality*.—TEXAS: Guadalupe Co., 2½ mi. above power house S. of Sequin

*Type*.—Unfigured specimen not found USNM, 1962

**Tellina** sp.**Tellinidae**

*Tellina* sp. Barry, 1942+, p. 71, pl. 11, fig. 2

*Range*.—Lower Eocene. Pendleton Ferry fm., middle Wilcox [Sabine] gr.

*Locality*.—LA.: For localities in Sabine Par. see Barry, p. 71

*Type*.—Figured specimen, LSU Pal. Mus.

*Tellina* sp. Barry, 1942+, p. 71, pl. 9, figs. 8, 9

See ? *Crassatella* sp. Harris, 1899b

**Tellina, n. sp.****Tellinidae**

*Tellina* n. sp., Harris, 1899b, no page, pl. 53, fig. 8 never described

*Range*.—Probably Eocene

*Locality*.—Unknown

*Type*.—Unknown

**Tellina sp.****Tellinidae**

*Tellina* sp. Harris, 1951, p. 24, pl. 13, fig. 1; Brann and Kent, 1960, p. 844

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—GA.: *Houston Co.*, Pennsylvania Cement Corp., Plant 2, Clinchfield quarry

*Type*.—Figured specimen, No. 24518 PRI

**Tellina sp.****Tellinidae**

*Tellina* sp. Harris, 1951, p. 24, pl. 13, fig. 2 ("Macoma-like"); Brann and Kent, 1960, p. 844

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—GA.: *Houston Co.*, Georgia Lime Rock Quarry, 3.9 mi. from Perry

*Type*.—Figured specimen, No. 24519 PRI

**Tellina sp.****Tellinidae**

*Tellina* sp. Harris, 1951, p. 24, pl. 13, fig. 3; Brann and Kent, 1960, p. 844

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—GA.: *Houston Co.*, Pennsylvania Cement Corp., Plant 2, Clinchfield quarry

*Type*.—Figured specimen, No. 24520 PRI

**Tellina sp.****Tellinidae**

*Tellina* sp. Harris, 1951, p. 24, pl. 13, fig. 4 "Metis-like"; Brann and Kent, 1960, p. 844

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—GA.: *Houston Co.*, Georgia Lime Rock quarry about 4 mi. from Perry

*Type*.—Figured specimen, No. 24521 PRI

**Tellina sp.****Tellinidae**

*Tellina* sp. Harris, 1951, p. 24, pl. 13, fig. 9; Brann and Kent, 1960, p. 844

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—FLA.: *Marion Co.*, Florida Lime Products Co., old Camp Quarry, about 2.2 mi. from main office 12th and Limekiln sts., Ocala

*Type*.—Figured specimen, No. 24526 PRI

***Teredo emacerata* Whitfield****Teredinidae**

*Teredo emacerata* Whitfield, 1885, p. 242, pl. 30, fig. 25; Dall, 1898b, p. 812; Whitfield, 1899, p. 165

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N.J.: *Monmouth Co.*, Shark R. (type)

*Type*.—Holotype, No. 7854, State Mus., Trenton, N.J.

***Teredo maverickensis* Gardner****Teredinidae**

*Teredo maverickensis* Gardner, 1923, p. 114, pl. 32, fig. 11; (not given in text); Trowbridge, 1932, pl. 31, fig. 4 type; Gardner, 1935, p. 196

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.

*Locality*.—TEXAS: *Maverick Co.*, Rio Grande, lower end of Maverick Co., about 40 ft. below Midway, Wilcox contact (type) (USGS Sta 10277)

*Type*.—Holotype, No. 352272 USNM

***Teredo mississippiensis* Conrad****Teredinidae**

*Teredo mississippiensis* Conrad in Wailes, 1854, p. 289, pl. 16, fig. 8 (reprint 1939, p. 19, pl. 3, fig. 8); Conrad, 1866a, p. 24; Dall, 1898b, p. 812; Harris and Palmer, 1946, p. 120, pl. 25, fig. 12; Brann and Kent, 1960, p. 854

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Town Cr., Jackson (type). LA.: *Grant Par.*, Montgomery, Red R.; *Caldwell and Catahoula Pars.*, Ouachita R.

*Types*.—Holotype +4 remaining specimens, No. 13192 ANSP Moore, 1962, p. 77

***Teredo ringens* Aldrich****Teredinidae**

*Teredo ringens* Aldrich, 1921, p. 17, pl. 2, fig. 12

*Teredo ? ringens* Aldrich, Gardner, 1935, p. 195; Gardner, 1945, p. 140 in part

*Range*.—Paleocene. Sucarnoochee cl., Porters Creek fm. (type), upper Midway gr.; Wills Point fm., upper Midway gr.

*Localities*.—ALA.: *Wilcox Co.*, 3 mi. S. of Estelle (type). TEXAS: *Guadalupe Co.*, 1½ mi. W. of Fentress; *Maverick Co.*, 27 mi. SE. of Eagle Pass on the Windmill (Jacal) ranch rd.

*Type*.—Holotype, No. 5, GSATC

***Teredo simplex* Lea****Teredinidae**

*Teredo simplex* Lea, 1833, p. 38, pl. 1, fig. 6; H. C. Lea, 1849, p. 106; Conrad, 1865a, p. 2; Conrad, 1866a, p. 9; de Gregorio, 1890, p. 237 believed a *Serpula*; Harris, 1895b, p. 42; Dall, 1898b, p. 812; Harris, 1919, p. 199, pl. 59, fig. 16 copy Lea

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5019 ANSP

**Teredo simplexopsis** de Gregorio**Teredinidae**

*Teredo simplexopsis* de Gregorio, 1890, p. 236, pl. 38, figs. 26, 26a, 26b; Cossmann, 1893, p. 5; Dall, 1898b, p. 813; Harris, 1919, p. 199, pl. 59, fig. 17 copy DeGregorio

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 26449 De Gregorio Coll. PRI

**Teredo tibialis** Morton

See *Polorthus tibialis* (Morton)

**Teredo virginiana** Clark**Teredinidae**

*Teredo virginiana* Clark, 1895, p. 5; Clark, 1896, p. 72, pl. 15, figs. 5a-c; Dall, 1898b, p. 813; Clark and Martin, 1901, p. 160, pl. 30, figs. ?1, ?1a, 2, 2a, 3

*Range*.—Paleocene. Aquia fm. (Clark and Martin). Lower Eocene. Nanjemoy fm. (type)

*Localities*.—MD.: Charles Co., ½ mi. below Chapel Point; W. of Port Tobacco; 1 mi. SE. of Mason Springs; Clifton Beach; Prince Georges Co., Hills Bridge; Upper Marlboro (deep cut near Chesapeake Beach, R.R. station); Upper Marlboro; 1 mi. NE. of Piscataway. VA.: King George Co., Woodstock (type); 2 mi. below Potomac Cr.; Prince George Co., Evergreen, James R.

*Types*.—Syntypes, USNM

**Textivenus reticulpta** (Meyer)**Veneridae**

*Venus reticulpta* Meyer, 1886b, p. 84, pl. 1, figs. 27, 27a; de Gregorio, 1890, p. 220, pl. 34, figs. 25-27 copies Meyer; Cossmann, 1893, p. 9

*Marcia reticulpta* (Meyer), Harris, 1919, p. 153, pl. 47, figs. 16-19

*Marcia* (*Katelsysia*) *reticulpta* (Meyer), Palmer, 1927/1929, p. 136, pl. 26, figs. 1-4 section *Textivenus*; Brann and Kent, 1960, p. 526

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638854 USNM

*Thracia estiva* de Gregorio, 1890, p. 230, pl. 36, figs. 21, 25; Cossmann, 1893, p. 7; Dall, 1903a, p. 1527; Harris, 1919, p. 200

Age and locality doubtful. De Gregorio did not know its origin. Type is lost. Included for completeness.

**Timothythus anteproductus** (Harris)**Ungulinidae**

*Sphaerella* (?) *anteproducta* Harris, 1895a, p. 50, pl. 2, fig. 4

*Diplodonta turgida* (Conrad), Dall, 1900, p. 1181, in part

*Sphaerella anteproducta* Harris, 1919, p. 124, pl. 40, fig. 6 copy holotype, figs. 7, 8, 8a, 8b; Brann and Kent, 1960, p. 806

*Diplodonta* (*Sphaerella*) *anteproducta* Harris, Gardner, 1945, p. 98 in part, ? pl. 7, figs. 2, 5

*Diplodonta* (*Timothythus*) *anteproducta* (Harris), Harris and Palmer, 1946, p. 87

*Timothythus anteproducta* (Harris), Chavan, 1962, p. 16

The type locality of *Timothythus anteproductus* (Harris) is not given in Harris' (1895a) original description. It is grouped among several

Texas localities. G. D. Harris' original Texas manuscript (never published except in parts) is in the library of the Paleontological Research Institution. The manuscript description of *T. anteproductus* is the same as published except under "Type specimen.—" reads . . . "Singley's Collection Mus. No. 364, Sta. 86." Sta. 86 in the east. is "Dr. Collard's farm, Town Branch, two hundred and fifty yards east of west boundary line of W. C. Sparks headright, Brazos County, M. Nagle."

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—TEXAS: Brazos Co., Dr. Collard's farm, Sparks Headright (type); Smithville, Colorado R.; Robertson Co., Cedar Cr., Wheelock League; Cherokee Co., cutting on Tyler and Southeastern R.R., 400 yds. S. of mile post No. 23; Lee Co., Elm Cr. LA.: Winn Par., St. Maurice; Cedar Bluff, Saline Bayou (not Sabine R. as in Harris, 1919), Red R.; Marble Quarry; Natchitoches Par., Natchitoches; Caddo Par., Vivian. Miss.: Clarke Co., McLeods Mill, Suwanlovey Cr.

*Type*.—Lost, Bur. Ec. Geol., Univ. Texas, *fide* Rodda, 1962

### **Timothyus bulla (Conrad)**

### **Ungulinidae**

*Sphaerella bulla* Conrad, 1865b, p. 138, pl. 10, fig. 9; Conrad, 1866a, p. 24; Harris, 1919, p. 125, pl. 40, fig. 9; Brann and Kent, 1960, p. 806

*Diplodonta turgida* (Conrad), Dall, 1900, p. 1181 in part

*Diplodonta (Timothyus) bulla* (Conrad), Harris in Harris and Palmer, 1946, p. 86, pl. 19, figs. 12-16 as *Sphaerella (Timothyus)*; Brann and Kent, 1960, p. 329

*Timothyus bulla* (Conrad), Chavan, 1962, pp. 15 [*Timothymus sic*], 16, fig. 12

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr. (type)

*Localities*.—MISS.: Clarke Co., "Enterprise"—Garland Cr. (type), *fide* Aldrich, 1885c, p. 307; Hinds Co., Moodys Branch and Town Cr., Jackson. LA.: Winn Par., Tullos.; Catahoula Par., Danville Ldg., Ouachita R. ARK.: Cleveland Co., Vince Bluff to Kingsland, Saline R.

*Types*.—Probable syntypes (2), No. 13222 ANSP, Moore, 1962, p. 43; "badly broken" [*fide* Harris and Palmer, 1946, p. 88]

### **Timothyus deflatus Harris**

### **Ungulinidae**

*Diplodonta (Timothyus) deflata* Harris in Harris and Palmer, 1946, p. 88, pl. 19, figs. 17, 18; Brann and Kent, 1960, p. 330

*Timothyus deflatus* Harris, Chavan, 1962, p. 16

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: Hinds Co., Jackson (type)

*Type*.—Holotype, No. 4324 PRI

*Trachycardium (Agnocardia) claibornense* (Aldrich)

See *Agnocardia claibornensis* (Aldrich)

### **Trachycardium ouachitense (Harris)**

### **Cardiidae**

*Cardium ouachitense* Harris, 1919, p. 132, pl. 42, fig. 1; Brann and Kent, 1960, p. 177



- Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr. (type)  
*Locality*.—LA.: *Union Par.*, Long Point, ½ mi. below Alabama  
 Ldg., Ouachita R. (type)  
*Type*.—Holotype, No. 1143 PRI

**Trapezium claibornense** Dall**Arcticiidae**

*Trapezium claibornense* Dall, 1900, p. 1199 (figured only), pl. 43, figs. 9, 10; Dall, 1903a, p. 1498; Schuchert, *et al.*, 1905, p. 660; Harris, 1919, p. 154, pl. 48, figs. 3, 4; Brann and Kent, 1960, p. 871

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 107794 USNM

*Trigonarca (Latiarca) gigantea* (Conrad)

See *Cucullaea (Latiarca) gigantea* Conrad

*Trigonarca (Latiarca) idonea* (Conrad)

See *Glycymeris idonea* (Conrad)

*Trigonarca (Latiarca) ononchela* [sic] (Rogers and Rogers)

See *Cucullaea (Latiarca) gigantea* Conrad

*Trigonarca pulchra* (Gabb) var. Harris

See *Pachecoa (Pachecoa) microcancellata* (Barry)

*Trigonarca (Latiarca) transversa* (Rogers and Rogers)

See *Cucullaea transversa* Rogers and Rogers

**Trigonia divaricata** Tuomey**Trigoniidae**

*Trigonia divaricata* Tuomey, 1853, p. 193; Stephenson, 1923, p. 192 "divericata" [sic]

*Range*.—Cretaceous mixed with Eocene. Near Wilmington, N.C.

Cretaceous is in contact with Tertiary (Stanton, 1891, pp. 333-334; Stephenson, 1923, p. 192; Kellum, 1926, p. 3)

*Locality*.—N.C.: *New Hanover Co.*, Wilmington (type)

*Type*.—Unknown

**Trigonia lunata** Tuomey**Trigoniidae**

*Trigonia lunata* Tuomey, 1853, p. 193

*Range*.—Cretaceous mixed with Eocene. Near Wilmington, N.C.

Cretaceous is in contact with Tertiary (Stanton, 1891, pp. 333-334; Stephenson, 1923, p. 192; Kellum, 1926, p. 3)

*Locality*.—N.C.: *New Hanover Co.*, Wilmington (type)

*Type*.—Unknown

**Trigoniocardia (Americardia) avona** (Richards)**Cardiidae**

*Cardium (Anthocardia)* [sic] *avonum* Richards in Richards and Palmer, 1953, p. 53, pl. 11, fig. 9 *Acanthocardia*

*Range*.—Middle Eocene. Avon Park ls. (type), upper Claiborne gr.

*Locality*.—FLA.: *Levy Co.*, ledges in timber road NW. corner, SW. ¼, sec. 14, T. 14 S., R. 15 E. (type)

*Type*.—Holotype (plastocast), No. I-7575 Fla. Geol. Surv.

**Trigoniocardia (Americardia) protoallicula (Richards)      Cardiidae**

*Cardium (Trigoniocardium) protoalliculum* Richards in Richards and Palmer, 1953, p. 52, pl. 12, figs. 1-3

*Range*.—Middle Eocene. Avon Park ls., upper Claiborne gr. Upper Eocene. Inglis fm. (type), lower Ocala gr.

*Localities*.—FLA.: Levy Co., rd. metal pit 2.9 mi. S. of N. limits of town of Gulf Hammock, just SW. of State Road 55 in SW.  $\frac{1}{4}$  sec. 34, T. 14 S., R. 16 E. (type); Sulphur Springs Landing, left bank Wekiva R., SW.  $\frac{1}{4}$  NW.  $\frac{1}{4}$  sec. 32, T. 14 S., R. 16 E.

*Types*.—Holotype, No. I-7572; paratypes, Nos. I-7571, I-7573, Fla. Geol. Sur.

*Trigonoarca [sic] decisa* (Conrad)

See *Pachecoa (Pachecoa) decisa* (Conrad)

*Trigonoarca [sic] decisa* Conrad var.

See *Pachecoa (Pachecoa) decisa* Conrad var.

*Trigonoarca [sic] declivis* (Conrad)

See *Pachecoa (Pachecoa) declivis* (Conrad)

*Trigonoarca [sic] ellipsis* (Lea)

See *Pachecoa (Stenzelia) ellipsis* (Lea)

*Trigonoarca [sic] perplana* (Conrad)

See *Pachecoa (Stenzelia) perplana* (Conrad)

*Trigonocoelia cuneus* (Conrad)

See *Trinacria cuneus* (Conrad)

*Trigonocoelia ledoides* Meyer

See *Pachecoa (Pachecoa ?) ledoides* (Meyer)

*Trigonodesma decisa* (Conrad)

See *Pachecoa (Pachecoa) decisa* (Conrad)

*Trigonodesma pulchra* (Gabb)

See *Pachecoa (Pachecoa) pulchra* (Gabb)

*Trinacria adamsi* Palmer

See *Pachecoa (Pachecoa) adamsi* (Palmer)

*Trinacria (Pachecoa) cainei* Harris

See *Pachecoa (Pachecoa) cainei* Harris

*Trinacria corvamnisi* Harris

See *Pachecoa corvamnisi* (Harris)

*Trinacria cossmanni* (Dall)

See *Nanohalus cossmanni* (Dall)

**Trinacria cuneus (Conrad)      Noetiidae**

*Pectunculus cuneus* Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 6; Harris, 1895b, p. 14

*Nucula carinifera* Lea, 1833, p. 198, pl. 6, fig. 212; H. C. Lea, 1849, p. 102; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 186; Harris, 1895b, p. 10; Schenck, 1934, p. 49

*Limopsis cuneus* (Conrad), Conrad, 1860, p. 297, pl. 47 (not pl. 46), fig. 17

*Trigonocoelia cuneus* (Conrad), Conrad, 1865a, p. 12 (misspelled *Trigonocoelix*); Conrad, 1866a, p. 4; Heilprin, 1884b, p. 89  
*Limopsis* (*Trigonocoelia* [sic]) *cuneus* (Conrad), de Gregorio, 1890, p. 191, pl. 23, fig. 28b copy Conrad

*Trinacria cuneus* (Conrad), Cossmann, 1893, p. 15; Dall, 1998b, pp. 577, 604; Harris, 1919, p. 37, pl. 18, figs. 8, 9; Stewart, 1930, p. 82; Stenzel, Krause, and Twining, 1957, p. 70; Brann and Kent, 1960, p. 875

*Range*.—Middle Eocene. McBean fm., upper Claiborne gr. (Stenzel, Krause, and Twining, 1957, p. 70); Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). S. C.: Orangeburg Co., Orangeburg (Stenzel, Krause, and Twining, 1957, p. 70)

*Types*.—Probably syntypes (2), No. 30567 ANSP, Moore, 1962, p. 51

*Trinacria decisa* (Conrad)

See *Pachecoa* (*Pachecoa*) *decisa* (Conrad)

*Trinacria decisa* (Conrad) "var."

See *Pachecoa* (*Pachecoa*) *decisa* (Conrad) "var."

*Trinacria decisa abbreviata* Harris

See *Pachecoa* (*Pachecoa*) *decisa abbreviata* (Harris)

"*Trinacria decisa carolina*" Harris

**Noetiidae**

*Trinacria decisa* var. *carolina* Harris, 1919, p. 41, pl. 18, figs. 18, 18a; Brann and Kent, 1960, p. 876

"*Trinacria decisa* var. *carolina* Harris", Stenzel, Krause, and Twining, 1957, p. 70

For "T." *decisa* see *Pachecoa decisa* (Conrad)

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Localities*.—S.C.: Orangeburg Co., 3 and 6 mi. WNW. of Orangeburg (type)

*Type*.—Holotype, No. 505 PRI

*Trinacria declivis* (Conrad)

See *Pachecoa* (*Pachecoa*) *declivis* (Conrad)

*Trinacria declivis* (Conrad), Renick and Stenzel

See *Pachecoa* (*Pachecoa*) *sabinica* (Harris)

*Trinacria ellipsis lisbonensis* Harris

See *Pachecoa lisbonensis* (Harris)

*Trinacria ledoides* (Meyer)

See *Pachecoa* (*Pachecoa* ?) *ledoides* (Meyer)

*Trinacria microcancellata* Barry

See *Pachecoa* (*Pachecoa*) *microcancellata* (Barry)

*Trinacria ovalis* Harris

See *Pachecoa ovalis* (Harris)

*Trinacria pectuncularis* (Lea)

See *Pachecoa* ? (*Pachecoa* ?) *pectuncularis* (Lea)

*Trinacria perplana* (Conrad)

See *Pachecoa* (*Stenzelia*) *perplana* (Conrad)

*Trinacria pulchra* (Gabb)See *Pachecoia* (*Pachecoia*) *smithvillensis* Stenzel and TwiningSee also *Pachecoia* (*Pachecoia*) *pulchra* (Gabb)See also *Pachecoia* (*Pachecoia*) *pulchra* (Gabb) variations*Trinacria pulchra sabinica* HarrisSee *Pachecoia* (*Pachecoia*) *sabinica* (Harris)*Triquetra aequorea* (Conrad)See *Mactropsis aequorea* (Conrad)*Triquetra rectilinearis* (Conrad)See *Mactropsis rectilinearis* (Conrad)*Variamussium alabamensis* (Aldrich), Sacco, 1897c, p. 50See *Amusium* (*Propeamusium*) *alabamense* (Aldrich)*Variamussium calvatum* (Morton), Sacco, 1897c, p. 50See *Eburneopecten calvatus* (Morton)**Veleda equilatera** Whitfield**Mactridae***Veleda equilatera* Whitfield, 1885, p. 238, pl. 30, fig. 17; Whitfield, 1899, p. 166*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.*Locality*.—N. J.: Monmouth Co., Shark R. (type)*Type*.—Holotype, No. 7857 State Mus., Trenton, N.J.*Veleda nasuta* WhitfieldSee *Periplomya truncata* Whitfield**Venericardia (Pleuromeris) aldrichi** Harris**Carditidae***Pleuromeris aldrichi* Harris, 1919, p. 95, pl. 32, figs. 26-29; Harris and Palmer, 1946, p. 75; Brann and Kent, 1960, p. 714*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)*Type*.—Holotype, No. 700 PRI*Venericardia alticosta* of authorsSee *V. alticostata* Conrad**Venericardia (Claibornicardia) alticostata** (Conrad) Pl. 2, figs 10, 11**Carditidae***Cardita alticostata* Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 7 in part; H. C. Lea, 1849, p. 97; Bronn, 1848a, p. 224 in part; not Tuomey, 1848, p. 153; d'Orbigny, 1850, p. 384 in part; Tuomey, 1858, pp. 264, 273 *alti-costa*; not Heilprin 1891a, p. 402 (as *alticosta*); Harris, 1895b, p. 4*Venericardia transversa* Lea, 1833, p. 68, pl. 2, fig. 46; Conrad, App. in Morton, 1834, p. 7 = *C. alticostata*; Bronn, 1848b, p. 1352; H. C. Lea, 1849, p. 107; Tuomey, 1858, p. 268; Harris, 1895b, p. 46 = *C. alticostata* Conrad*Venericardia alticostata* (Conrad), Conrad, 1865a, p. 7; Conrad, 1866a, p. 5 [as *alticosta*]; Aldrich, 1886, p. 44 [as *alticosta*]; Dall, 1903a, p. 1423; Harris, 1896, p. 57 in part; not Harris, 1897b, p. 55, pl. 11, fig. 1; Tarr, 1906, p. 437, fig. 6; Harris, 1919, p. 82 in part, pl. 30, figs. 3-5, 12 not figs. 1, 2 = *V. sillimani* Lea; Rutsch, 1943, p.

- 156; Verastegui, 1953, pp. 40, 42; Brann and Kent, 1960, p. 952 in part.  
 Not "? *Cardita alticosta*" Gabb, 1869, p. 268 = *Cardita arivechensis*, n.n. Heilprin, 1891b, Mexican species, p. 452  
*Cardita* (*Venericardia*) *transversa* Lea Mut. *transversa* Lea, de Gregorio, 1890, pp. 211, 212, pl. 30 (not 31 as in text), fig. 17 copy Lea, figs. 18-22  
*Cardita transversa* (Lea), Cossmann, 1893, p. 14 in part  
*Venericardia* (*Glyptoactis*) *alticostata* (Conrad), Stewart, 1930, p. 151; Gardner, 1935, pp. 157, 162 in part  
*Venericardia alticosta* [sic] (Conrad), Shimer and Shrock, 1944, p. 419 in part  
*Venericardia* (*Claibornicardia*) *alticostata* (Conrad), Stenzel, Krause, and Twining, 1957, pp. 104-109, pl. 13, figs. 1-9; pl. 14, fig. 5; text fig. 17. See for synonymy.

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Possible syntypes, No. 30562 ANSP Moore, 1962, p. 36

- Venericardia alticostata* (Conrad), Dall, 1903a, in part; Harris, 1919, p. 82, pl. 30, figs. 1, 2

See *Venericardia* (*Claibornicardia*) *sillmani* Lea

- Venericardia alticostata* (Conrad) var. Harris, 1896

See *Venericardia* (?) *wilcoxensis* Dall

See also *Venericardia* (?) *whitei* Gardner

See also *Venericardia* (?) *hesperia* Gardner

- Venericardia alticostata* (Conrad) var. Harris, 1897b

See *Venericardia* (*Venericor*) *greggiana* Dall

***Venericardia* (*Claibornicardia*) *alticostata* (Conrad) "var." *Carditidae***

- Venericardia alticostata* Conrad "var." Harris, 1919, p. 84, pl. 31, figs. 1-4; Brann and Kent, 1960, p. 952

*Range*.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.

*Types*.—Figured specimens, Nos. 668-671 PRI

- Venericardia alticostata hesperia* Gardner

See *Venericardia* (?) *hesperia* Gardner

- Venericardia alticostata whitei* Gardner

See *Venericardia* (?) *whitei* Gardner

***Venericardia* (*Venericor*) *angustoscrobis* Gardner and Bowles *Carditidae***

- Venericardia* (*Venericor*) *angustoscrobis* Gardner and Bowles, 1939, p. 175, pl. 38, figs. 4, 7, cf. 3, 8

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. USGS sta. 13060 (type)

*Type*.—Holotype, No. 372691 USNM



"*Venericardia antiquata* Whitfield", Gardner and Bowles, 1939, p. 145 is a *nomen nudum*. Not *Cardita antiquata* (Linné), 1767, p. 1138

["*Venericardia antiquata*" (Linné), Dall, 1903a, p. 1409.]

This name is certainly an error for *V. perantiqua* Conrad, 1865a which was included by Whitfield, 1885, p. 232 in the Shark River marl. No venericardid species of this name was described by Whitfield. Whitfield compared *V. perantiqua* with *V. rotunda* Lee as did Gardner and Bowles which suggests that Gardner and Bowles were referring to the same species.

***Venericardia* (*Venericor*) *apodensata* Gardner and Bowles      **Carditidae****

*Venericardia* (*Venericor*) *apodensata* Gardner and Bowles, 1939, p. 192, pl. 37, fig. 13; pl. 43, fig. 8; pl. 45, figs. 15, 16; Harris and Palmer, 1946, p. 66, pl. 15, figs. 3, 4

*Venericardia planicosta* Lamarck "var." Brann and Kent, 1960, p. 961

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Moodys Branch, Jackson USGS sta. 6462 (type); S. of pump house, Jackson; gully S. of the rd. E. of flag station on Yazoo and Miss. Valley R.R.; *Clarke Co.*, 4½ mi. NE. of Shubuta. For localities in ALA., ARK., LA., and TEXAS see Gardner and Bowles, 1939, p. 193.

*Types*.—Syntypes, Nos. 369599, 136644 USNM

***Venericardia* *aposmithii* Gardner and Bowles      **Carditidae****

*Venericardia planicosta* Lamarck form  $\beta$  Harris, 1897b, p. 55, pl. 9, figs. 1, 2; Brann and Kent, 1960, p. 960 No. 156 only

*Venericardia regia* Conrad, Dall, 1903a, p. 1422 in part; Stewart, 1930, pp. 154-156

Cf. *Venericardia planicosta* Lamarck, Scott, 1932, p. 328, pl. 23, fig. 1; Not Lamarck, 1801, p. 123

*Venericardia* (*Venericor*) *aposmithii* Gardner and Bowles, 1939, p. 186, pl. 43, figs. 1, 6 copy Harris, 7; pl. 44, figs. 1, 2

*Range*.—Lower Eocene. Nanafalia fm., lower Wilcox [Sabine] gr.; Tuscahoma fm. (type), middle Wilcox [Sabine] gr.

*Localities*.—ALA.: *Monroe Co.*, Bells Ldg., Alabama R., sec. 36, T. 10 N., R. 6 E., (type), Greggs Ldg., Alabama R.; *Wilcox Co.*, Yellow Bluff, Alabama R.; *Marengo Co.*, Nanafalia Bluff, Tombigbee R.; *Choctaw Co.*, Tuscahoma Ldg., Tombigbee R.

*Types*.—Holotype, No. 1434 USNM; paratypes, No. 137224 USNM, No. 156 PRI

*Venericarda aragonia* Arnold and Hannibal, Rutsch, 1936a in part  
See *Venericardia* (*Leuroactis*) *horatiana* Gardner

***Venericardia* (*Venericor*) *ascia* Rogers and Rogers      **Carditidae****

*Venericardia ascia* Rogers and Rogers, 1839b, p. 374, pl. 29, fig. 2 (3 figs.) (reprint, 1884, p. 671, pl. 4, fig. 2 [3 figs.]); H. C. Lea, 1849, p. 107; Conrad, 1865a, p. 7; not Heilprin, 1891a, p. 402; not Harris, 1896, p. 58; Clark, 1896, p. 80; Clark and Martin, 1901, p. 177; Dall, 1903a, pp. 1419, 1422 in part; Woods, 1922, p. 69; Stewart, 1930, p. 163; Rutsch, 1936a, p. 164

*Venericardia marylandica* Clark and Martin, 1901, p. 179, pl. 40, figs. 7, 7a; Dall, 1903a, pp. 1419, 1423; Waring, 1917, p. 54; Woods, 1922, p. 69; Stewart, 1930, p. 151. *Fide* Gardner and Bowles, 1939

*Venericardia (Venericor) ascia* Rogers and Rogers, Gardner and Bowles, 1939, p. 171, pl. 35, figs. 3, 5 type *V. marylandica* Clark and Martin, figs. 4, 6, 7 type *V. ascia*

Not *Venericardia planicosta* form *a* Harris, 1897b, p. 54 as in Dall, 1903a, p. 1423 = Ala.

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—VA.: King George Co., "near the Potomac", (type); Woodstock; (Co. unknown), Pamunkey R. MD.: Charles Co., 1 mi. below Popes Cr.; 2 and 2½ mi. above Popes Cr.

*Types*.—*V. ascia*, holotype, No. 12986 BSNH *fide* Cushman, 1907 possibly now MCZ; No. 12507 ANSP *fide* Stewart 1930. *V. marylandica* Clark and Martin, holotype USNM

**Venericardia (Venericor) bashiplata** Gardner and Bowles **Carditidae**

*Venericardia planicosta* (of authors), Harris, 1897b, p. 55 in part, pl. 9, fig. 3; pl. 10, fig. 5; Brann and Kent, 1960, p. 960, Nos. 133, 157 only ["var." ♂]

*Venericardia planicosta* var. 5 [error for ♂] Harris, Waring, 1917, p. 54

*Venericardia planicosta* (of authors), Stewart, 1930, pp. 156, 161

*Venericardia (Venericor) bashiplata* Gardner and Bowles, 1939, p. 171, pl. 33, fig. 9; pl. 34, figs. 3-6; Barry, 1942+, p. 62, pl. 8, fig. 1; Wasem and Wilbert, 1943, p. 188, pl. 31, fig. 9

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Beaver Cr., ¼ mi. E. of Choctaw Corners (type); Woods Bluff, Tombigbee R.

For additional localities in ALA., MISS., and TEXAS see Gardner and Bowles, 1939, p. 171, and Barry, 1942+, p. 63

*Types*.—Syntypes, No. 371914 USNM

**Venericardia (?) bilineata** (Conrad) **Carditidae**

*Cardita bilineata* Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 9; H. C. Lea, 1849, p. 97; Conrad in Wailes, 1854, p. 287 (reprint 1939, p. 10); Harris, 1919, p. 86

*Venericardia bilineata* (Conrad), Conrad, 1865a, p. 7; "?" Conrad, 1866a, p. 5; Dall, 1903a, p. 1424; Harris, 1919, p. 86, pl. 31, fig. 8 copy Conrad

*Cardita bilineata* Conrad (not Tuomey), Tuomey, 1848, p. 153

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S. C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

*Types*.—Missing, ANSP Moore, 1962, p. 42

**Venericardia (cf. Claibornicardia) blandingi** Conrad **Carditidae**

*Venericardia blandingi* Conrad, 1830, p. 229, pl. 9, fig. 20; Tuomey, 1848, p. 153; Bronn, 1848b, p. 1350; H. C. Lea, 1849, p. 107; Bronn, 1849, p. 298; Conrad, 1865a, p. 7; Conrad, 1866a, p. 5; Dall, 1903a, p. 1424; Harris, 1919, p. 86, pl. 31, figs. 11, 11a copies Conrad, 1830; Stenzel, Krause and Twining, 1957, p. 129

Not *Cardita Blandingi* (Conrad) Heilprin, 1891a, p. 402

*Range*.—Middle Eocene. Santee ls. (type), upper Claiborne gr.

*Locality*.—S. C.: Orangeburg Co., Vance's Ferry, Santee R. (type) (see Stenzel, Krause, and Twining, 1957, p. 129)

*Types*.—? Syntypes, No. 30500 ANSP Moore, 1962, p. 43 "Conrad, may have had one specimen"

**Venericardia (?) brittoni** (Whitfield)**Carditidae**

*Cardita brittoni* Whitfield, 1885, p. 233, pl. 30, figs. 11, 12; Whitfield, 1899, p. 155 type locality designated

*Venericardia Brittoni* (Whitfield), Dall, 1903a, p. 1424

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Localities*.—N. J.: *Monmouth Co.*, Shark R.; Squankum (type)

*Type*.—Holotype, AMNH

**Venericardia (Baluchicardia) bulla** Dall**Carditidae**

*Venericardia bulla* Dall, 1903a, p. 1424, pl. 56, figs. 13, 14; Schuchert, *et al.*, 1905, p. 689; F. B. Plummer, 1933, pp. 811, 812, pl. 8, figs. 2a, 2b; Rutsch, 1936b, pp. 197, 198; Rutsch, 1943, p. 156

*Venericardia (Glyptoactis ?) bulla* Dall, Gardner, 1935, pp. 157, 163, pl. 13, figs. 1-4; pl. 14, figs. 4, 5 copy Dall, syntypes, fig. 6

*Venericardia (Baluchicardia) bulla* Dall, Stenzel, Krause, and Twinning, 1957, p. 107

*Range*.—Paleocene. Wills Point fm., upper Midway gr. (type); Naheola fm., upper Midway gr.

*Localities*.—TEXAS: "Brown sandstone of the Midway horizon, east of the first small creek on the road to Bastrop, Texas, from Old Garfield in the Austin quadrangle" Dall, 1903a, (type); *Bastrop Co.*, N. branch Wilbarger Cr.,  $\frac{1}{2}$  mi. below Travis-Bastrop Co. line; Dry Cr.,  $7\frac{1}{2}$  mi. SW. of Elgin; Colorado R., 2 mi. below Travis-Bastrop Co. line; Colorado R., 5 mi. below Webberville, Bur. Ec. Geol. sta. 3 mi. above Cedar Cr. bridge on Austin-Red Rock rd.

*Type*.—Holotype, No. 164556 USNM

**Venericardia (?) carolinensis** (Conrad)**Carditidae**

*Cardita carolinensis* Conrad, 1848a, p. 297; Conrad, 1848b, p. 128; Dall, 1903a, p. 1424; Harris, 1919, pp. 77, 85

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S. C.: *Calhoun Co.*, "St. Matthew's Parish, Orangeburg District" (type)

*Type*.—Missing, ANSP Moore, 1962, p. 44

**Venericardia (Venericor) claiboplata** Gardner and Bowles**Carditidae**

Probably *Cardita planicosta* Dana, 1863, fig. 801

*Venericardia planicosta* Dana, 1895, p. 897, fig. 1481 same as 1863

*Cardita (Venericardia) planicosta* Lamarck, de Gregorio, 1890, p. 214, in part, pl. 32, figs. 6-9, not fig. 10 (= *V. regia* Conrad)

*Venericardia planicosta* Lamarck, Harris, 1919, p. 77, in part, form  $\delta$  [delta], pl. 27, figs. 5, 6; pl. 28, figs. 1, 2; Brann and Kent, 1960, p. 960 in part, Nos. 635, 636, 638, 639 only. Not Lamarck, 1801, p. 123

*Venericardia claiboplata* Gardner and Bowles, Cooke, 1936, pp. 61-64 *nomen nudum*

*Venericardia (Venericor) claiboplata* Gardner and Bowles, 1939, p. 173, pl. 36, figs. 1-4

*Venericardia (Venericor) planicosta* Lamarck var. *claiboplata* Gardner and Bowles, Shimer and Shrock, 1944, p. 419, pl. 167, fig. 22 copy Gardner and Bowles

*Range*.—Middle Eocene. Recklaw fm., lower Claiborne gr.; Weches fm., middle Claiborne gr.; Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; McBean fm., upper Claiborne gr.; Gosport sd., uppermost Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (USNM 11365 "cotype"); *Clarke Co.*, Clarksville (USNM 1434 "cotype") (type). For additional localities and formations in ALA., LA., S.C., and TEXAS see Gardner and Bowles, 1939, p. 173

*Types*.—Syntypes, Nos. 11365, 1434 USNM (Gardner and Bowles "cotypes"). Lectotype herein designated, No. 1434 USNM

Gardner and Bowles indicated two localities of different age as "cotypes". Because such a designation is not satisfactory we herein designate, No. 1434 USNM as lectotype thereby making Clarksville, Clarke Co., Ala. the type locality.

**Venericardia (Venericor ?) claviger** Gardner and Bowles **Carditidae**

*Venericardia claviger* Gardner and Bowles, Cooke, 1936, p. 58 *nomen nudum*

*Venericardia (Venericor ?) claviger* Gardner and Bowles, 1939, p. 176, pl. 38, figs. 1, 2

*Range*.—Middle Eocene. Claiborne gr. undifferentiated (type)

*Localities*.—ALA.: *Clarke Co.*, Selma and Mobile R.R. cut near Jackson USGS sta. 2666 (type). S. C.: *Aiken Co.*, Kennedy's scarp,  $\frac{1}{2}$  mi. W. of Cox's Bridge, S. side of Tinker's Cr.

*Type*.—Holotype, No. 136973 USNM

**Venericardia (Claibornicardia) complexicosta** Meyer and Aldrich

**Carditidae**

*Venericardia complexicosta* Meyer and Aldrich, 1886, p. 45, pl. 2, figs. 21, 21a; not Harris, 1896, p. 58 under *V. planicosta*; Dall, 1903a, pp. 1424, 1429; Harris, 1919, p. 84, pl. 31, fig. 5 copy type [as "Aldrich and Meyer"]

*Venericardia (Claibornicardia) complexicosta* Meyer and Aldrich, Stenzel, Krause, and Twining, 1957, p. 111, pl. 15, figs. 1-4

*Range*.—Middle Eocene. Archusa marl mem., Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: *Clarke Co.*, Wautubbee (type) = R.R. cut about 1 mi. N. of depot at Wautubbee or about 0.4 mi. N. of overpass of U. S. Highway 11 (Laurel-Meridan rd.) over Southern R.R., NW., Clarke Co. (*vide* Stenzel, Krause, and Twining, 1957, p. 113); *Newton Co.*, Decatur (Bur. Ec. Geol. loc. No. Miss. 51). LA.: *Bienville Par.*, Mt. Lebanon. TEXAS: for Texas localities see Stenzel, Krause, and Twining, 1957, p. 114

*Type*.—Holotype not USNM, 1962

**Venericardia (Venericor) cookei** Gardner and Bowles

**Carditidae**

*Venericardia (Venericor) cookei* Gardner and Bowles, 1939, p. 176, pl. 38, figs. 5, 6

*Range*.—Upper Eocene. "Jackson gr." (type) (Gardner and Bowles, 1939); [Middle Eocene. Tallahatta fm., lower Claiborne gr., (Stenzel, Krause, and Twining, 1957, p. 68)]

*Locality*.—ALA.: *Covington Co.*, Caton's Bluff, Conecuh R. (type)

*Type*.—Holotype, No. 129767 USNM



**Venericardia (Glyptoactis ?) crenaea** Gardner**Carditidae***Venericardia (Glyptoactis) crenaea* Gardner, 1935, pp. 157, 167, pl. 15, figs. 1, 2*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.*Localities*.—TEXAS: *Medina Co.*, bed of Hondo R., 1 mi. NW. of New Fountain (type); 1 mi. E. of Church at Quihi;  $3\frac{1}{4}$  mi. N.  $25^\circ$  W. of Dunlay; Verde Cr.,  $4\frac{1}{2}$  mi. NE. of Hondo,  $1\frac{3}{4}$  mi. NW. of New Fountain; D'Hanis-Yancey rd.,  $7\frac{1}{2}$  mi. SE. of D'Hanis; *Uvalde Co.*, 11 mi. S. of Sanibal, a few hundred yards S. of junction of Elm Cr. with Sanibal Cr.;  $\frac{1}{2}$  mi. below Bob Evans' (Myrick's) apiary*Types*.—Syntypes, No. 370911 USNM**Venericardia (Venericor) densata** (Conrad)**Carditidae***Cardita densata* Conrad, 1845b, p. 173; Conrad, 1848b, p. 130, pl. 14, fig. 24; H. C. Lea, 1849, p. 97; Tuomey, 1858, p. 264; Dall, 1903a, pp. 1421-1423*Venericardia densata* (Conrad), Conrad, 1865a, p. 8; Conrad, 1866a, p. 5; not Harris, 1896, p. 58; Dall, 1903a, p. 1421-1423; Stewart, 1930, p. 157; Chavan, 1936a, p. 116 in part; Chavan, 1936b, p. 167*Cardita (Venericardia) densata* Conrad, de Gregorio, 1890, p. 214, pl. 32, fig. 11 copy Conrad*Venericardia planicosta* var. "*densata*" (Conrad), Harris, 1919, p. 77, pl. 27, figs. 1, 1a, 2, 3; Brann and Kent, 1960, p. 962*Venericardia (Venericor) densata* (Conrad), Gardner and Bowles, 1939, p. 189, pl. 37, fig. 7; pl. 45, figs. 1-11, 14; Gardner, 1945, p. 36*Venericardia planicosta* var. *densata* (Conrad), Harris and Palmer, 1946, p. 65*Venericardia (Venericor) planicosta densata* (Conrad), Stenzel, Krause, and Twining, 1957, p. 103, pl. 8, fig. 10; pl. 11, figs. 1-4, 13, 14; Perrilliat Montoya, 1963, p. 7, pl. 4, fig. 3Not *Venericardia (Venericor) planicosta* cf. *densata* (Conrad), Wilbert, 1953, p. 123 = *Venericardia* sp.

For complete synonymy see Gardner and Bowles, 1939, p. 189

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr. see Gardner and Bowles, 1939 for complete range*Locality*.—ALA.: *Monroe Co.*, [base of] Claiborne Bluff, Alabama R. (type). For additional localities see Gardner and Bowles.*Type*.—Probable holotype, No. 30639 ANSP Moore, 1962, p. 53*Venericardia densata mooreana* ConradSee *Venericardia (Venericor) mooreana* Conrad**Venericardia (Venericor) densata pendletonensis** Gardner and Bowles**Carditidae***Venericardia planicosta* Lamarck, Harris, 1899b, p. 302 in part, pl. 53, fig. 6. Not Lamarck, 1801, p. 123*Venericardia (Venericor) densata pendletonensis* Gardner and Bowles, 1939, p. 188, pl. 45, figs. 12, 13; Barry, 1942+, p. 60, pl. 7, figs. 10, 11; Wasem and Wilbert, 1943, pp. 188, 192, pl. 31, fig. 8



*Range*.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.; Pendleton Ferry fm. (type), middle Wilcox [Sabine] gr.

*Localities*.—TEXAS; Sabine Co., Pendleton Bluff,  $\frac{1}{4}$  mi. above Pendleton Ferry, Sabine R. (type). For further localities in Natchitoches Par., Sabine Par., LA., and Sabine Co., TEXAS, see Barry, 1942+, p. 61

*Type*.—Holotype, No. 372694 USNM

### **Venericardia diversidentata Meyer**

### **Carditidae**

*Venericardia diversidentata* Meyer, 1885a, pp. 460, 467; Casey, 1903, p. 264; Gardner, 1945, p. 93 in part; Harris and Palmer, 1946, p. 69, pl. 16, fig. 10 type; pl. 17, figs. 1-3, 5-6; Brann and Kent, 1960, pp. 953, 954

*Venericardia* sp. cf. *V. diversidentata* Meyer, Gardner, 1945, p. 93 in part

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: Hinds Co., Jackson (type); Town Cr., Jackson. LA.: Caldwell Par., Bunker Hill Ldg., Ouachita R.

*Type*.—Holotype, No. 74 GSATC

### **Venericardia diversidentata Meyer "var."**

### **Carditidae**

*Venericardia diversidentata* Meyer "var.", Harris and Palmer, 1946, p. 69, pl. 17, figs. 7-11; Brann and Kent, 1960, p. 954

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

*Localities*.—MISS.: Hinds Co., Moodys Branch, Jackson. LA.: Grant Par., Montgomery Ldg., Red R.

*Types*.—Figured specimens, Nos. 4274-4279 PRI

*Venericardia diversidentata garlandia* Harris, 1946; Brann and Kent, 1960 *nomen nudum*

See *Venericardia diversidentata symmetrica* Dall

*Venericardia diversidentata praecisa* Dall

See *Venericardia praecisa* Dall

### **Venericardia diversidentata symmetrica Dall**

### **Carditidae**

*Venericardia (Pleuromeris) parva symmetrica* Dall, 1903a, p. 1432

*Venericardia diversidentata symmetrica* Dall, Harris and Palmer, 1946, p. 71, pl. 17, figs. 15, 16, 16a, 17, 17a [on pl. as var. *garlandia* = *nomen nudum*]; Brann and Kent, 1960, p. 955

*Range*.—Middle Eocene. Gosport sd., (syntype), uppermost Claiborne gr. Upper Eocene. White Bluff fm. (syntype), lower Jackson gr.

*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (syntype). ARK.: Drew Co., Cornish Ferry, Saline R. (syntype)

The syntypes of this species should be examined critically to verify if they belong to the same subspecies. If not one should be designated a lectotype to establish the type locality and formation.

*Types*.—Syntypes, Nos. 164613 (Ark.); 164614 (Ala.) USNM

**Venericardia (Glyptoactis) eoa** Gardner**Carditidae***Venericardia eoa* Gardner ms., F. B. Plummer, 1933, pp. 811, 812, pl. 8, fig. 1*Venericardia (Glyptoactis) eoa* Gardner, 1935, p. 170, pl. 15, figs. 3-5*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr. [below the *Venericardia bulla* zone]*Localities*.—TEXAS; *Bastrop Co.*, S. bank of Colorado R., 1½ mi. below the Travis-Bastrop Co. line (type); 4-5 mi. below Webberville, Colorado R.*Types*.—Holotype and paratype, No. 370918 USNM**Venericardia (?) eutawcolens** Harris**Carditidae***Venericardia eutawcolens* Harris in Van Winkle and Harris, 1919, p. 13, pl. 2, figs. 1, 2; Brann and Kent, 1960, pp. 955, 956*Range*.—Middle Eocene. Santee ls. (type), upper Claiborne gr. *vide* Cooke and Mac Neil, 1952, p. 20*Localities*.—S.C.; *Orangeburg Co.*, Eutaw Springs (type); [*? Co.*], Center Hill*Types*.—Syntypes, Nos. 1401, 1402, PRI*Venericardia flabellum* HarrisSee *Venericardia rotunda flabellum* Harris*Venericardia flabellum kingi* PlummerSee *Venericardia rotunda kingi* Plummer**Venericardia (Venericor) francescae** Gardner and Bowles**Carditidae***Venericardia (Venericor) francescae* Gardner and Bowles, 1939, p. 183, pl. 46, figs. 6, 7*Range*.—Paleocene. Clayton fm. (type), lower Midway gr.*Locality*.—MISS.: *Union Co.*, St. Louis-San Francisco R.R. cut, 1-1½ mi. SE. of New Albany (type)*Type*.—Holotype, No. 372925 USNM**Venericardia (Venericor) gardnerae** Barry**Carditidae***Venericardia (Venericor) gardnerae* Barry, 1942+, p. 59, pl. 7, figs. 1-3*Range*.—Paleocene. "Logansport fm." (name preoccupied) (type), middle Midway gr.*Locality*.—LA.: *Natchitoches Par.*, E. of bridge over Rock Cr. on dirt rd. leading W. from La. Highway 404 (type). For additional localities see Barry, 1942+, p. 60*Types*.—Holotype, No. 5012; paratype, No. 5013 LSU Pal. Mus.**Venericardia (Venericor ?) greggiana** Dall**Carditidae***Venericardia alticostata* var. Harris, 1897b, p. 55, pl. 11, fig. 1; Brann and Kent, 1960, p. 951, No. 137 only*Cardita decusata* [sic] Tuomey, 1858, p. 271 *nomen nudum* not "Lamarck, 1807" as in Dall, 1903a, Lamarck's name was *Venericardia decussata* Lam., 1806, p. 59 not *Cardita*. Not *C. decussata* (Lam.) Nyst, 1845, p. 216 or G. V. Muenster, 1834, p. 9*Venericardia greggiana* Dall, 1903a, p. 1425; Rutsch, 1943, p. 156*Venericardia (Venericor ?) greggiana* Dall, Gardner and Bowles, 1939, p. 194, pl. 46, fig. 9 (copy Harris, "holotype"); Harris and Palmer, 1946, p. 68

*Range*.—Lower Eocene. Greggs Ldg. mem., Tuscahoma fm. (type), middle Wilcox [Sabine] gr.

*Localities*.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type); Bells Ldg., Alabama R.; Wilcox Co., Lower Peachtree Ldg., Alabama R.; Marengo Co., Nanafalia Ldg., Tombigbee R.

This species was not figured by Dall or a type designated other than the locality "Lower bed at Gregg's Landing, Alabama", and the reference to Harris, 1897b (p. 55, pl. 11, fig. 1). Gardner and Bowles, 1939, considered the specimen of Harris' figure as the holotype. We herein designate the specimen (No. 137 PRI, Harris, 1897b, pl. 11, fig. 1; Brann and Kent, 1960, p. 951) as lectotype to satisfy technicalities of type definition.

*Type*.—Lectotype, No. 137 PRI

**Venericardia (?) gulielmi** Gardner and Bowles

**Carditidae**

*Venericardia simplex* Dall, 1903a, p. 1426, pl. 56, fig. 12; Schuchert, et al., 1905, p. 689; not *Cardita simplex* Wood, 1871, p. 151

*Venericardia gulielmi* Gardner and Bowles, 1939, p. 174, pl. 42, fig. 4

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

*Type*.—Holotype, No. 154725 USNM

**Venericardia (Venericor) hatcheplata** Gardner and Bowles

**Carditidae**

*Venericardia planicosta* Lamarck, Aldrich, 1886, p. 50 (listed only); Cooke, 1926a, pl. 94, fig. 7, (not Nanafalia but Hatchetigbee fide Gardner and Bowles). Not Lamarck, 1801, p. 123

*Venericardia planicosta* form ♂ Harris, 1897b, p. 55 in part; Dall, 1903a, p. 1422 in part; Stewart, 1930, p. 156 in part

*Venericardia planicosta* var. *laticardo* Wood, Dall, 1903a, p. 1422; not Wood, 1871, p. 150, pl. 21, fig. 5d

*Venericardia (Venericor) hatcheplata* Gardner and Bowles, 1939, p. 172, pl. 33, figs. 8, 12; pl. 34, figs. 1, 2; Perrilliat Montoya, 1963, p. 8, pl. 12, figs. 1, 5

*Range*.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R., sta. USGS 261 (type); roadside ½ mi. W. of Butler, GA.; Stewart Co., 1¼ mi. NE. of Troutman, spring W. of Georgia, Florida, and Alabama, R.R.

*Types*.—Syntypes, No. 372173 USNM

**Venericardia (?) hesperia** Gardner

**Carditidae**

*Venericardia alticostata* Conrad var., Harris, 1896, p. 57 in part. Not *Cardita alticostata* Conrad, 1833a, p. 342

*Venericardia alticostata* subsp. *hesperia* Gardner, 1923, p. 112, pl. 32, figs. 1, 2 not indicated in text

*Venericardia hesperia* Gardner, Trowbridge, 1932, pl. 31, figs. 1, 2 copy Gardner type; F. B. Plummer, 1933, pp. 547, 550; Stenzel, Krause, and Twining, 1957, p. 106 subgenus ?

*Venericardia (Glyptoactis ?) hesperia* Gardner, Gardner, 1935, pp. 157, 164; Gardner and Bowles, 1939, pp. 147, 148, 161, 195, pl. 46, figs. 4, 5

? *Venericardia hesperia* Gardner, Gardner, 1935, p. 165, pl. 15, fig. 6

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.

*Localities*.—TEXAS: *Uvalde Co.*, bluff on Frio R. half mile below Myrick's (Evans's) apiary (type); Frio R. just above water-hole opposite apiary below Englemann's ranch; 11 mi. S. of Sabinal; *Medina Co.*, 1¼ mi. NW. of New Fountain; *Maverick Co.*, 18 mi. SE. of Eagle Pass; Bibora Cr., just below Bibora tank about 18 mi. SE. of Eagle Pass; White Bluff on Rio Grande on land of Indio Cattle Co. about 4½ mi. W. of S. of Jacal house in SE. Maverick Co. For additional localities see Gardner and Gardner and Bowles.

*Type*.—Holotype, No. 352268 USNM

**Venericardia (Venericor) hijuana** Gardner and Bowles **Carditidae**

*Cardita subquadrata* Gabb, 1860d, p. 395; not Gabb, 1860a, p. 303; Meek, 1864, p. 11; Harris, 1896, p. 60. Not Conrad, 1848a, p. 298; not Conrad, 1848b, p. 128

*Venericardia planicosta* var. *smithi* Harris, 1896, p. 60 in part, not *V. smithi* Aldrich, 1894b

*Venericardia (Venericor) hijuana* Gardner and Bowles, 1939, p. 184, pl. 42, figs. 1, 6-10

*Venericardia (Pacifcor) hijuana* Gardner and Bowles, Verastegui, 1953, pp. 15, 25

*Range*.—Paleocene. Clayton fm. (type), lower Midway gr.

*Localities*.—TENN.: *Hardeman Co.*, milepost 481, E. of Middleton USGS station 6091; cut on Southern R.R., 1½ mi. E. of Middleton and 200 ft. E. of milepost 481, USGS station 6495 (type localities)

*Types*.—Syntypes, Nos. 372919, 372920 USNM

**Venericardia (Leuroactis) horatiana** Gardner **Carditidae**

*Venericardia planicosta* form  $\gamma$  Harris, 1897b, p. 55 in part, pl. 10, figs. 1-4; Dall, 1903a, p. 1422 in part; Olsson, 1928, p. 27 in part; Harris, 1919, p. 77 in part, not pl. 28, fig. 3; pl. 29 fig. 1; Brann and Kent, 1960, pp. 959, 960, Nos. 130, 131, 132, 134

*Venericardia hornii* Gabb, Dall, 1903a, p. 1422 in part not *Cardita hornii* Gabb, 1864, pp. 174, 232, pl. 24, fig. 157

*Venericardia planicosta* Lamarck, Waring, 1917, p. 54 in part. Not Lamarck, 1801, p. 123

*Venericardia horatiana* Gardner, 1927, p. 369, figs. 28, 29; Stewart, 1930, p. 160, pl. 9, figs. 1-3; pl. 10, fig. 3; Rutsch, 1936a, pp. 163, 171, 174; Chavan, 1936a, p. 117

*Venericardia aragonia* Arnold and Hannibal, Rutsch, 1936a, pp. 163, 164, 168, 170, 171, 174, 177, 180. Not Arnold and Hannibal, 1914, p. 907

*Venericardia (Venericor) horatiana* Gardner, Gardner and Bowles, 1939, p. 177, pl. 39, figs. 1-3, 5; pl. 40, figs. 1, 2, 5; Barry, 1942+, p. 63, pl. 8, fig. 7

*Venericardia (Leuroactis) horatiana* Gardner, Verastegui, 1953, pp. 15, 16, 48, 59

*Range*.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.; Sabinetown fm. (type), upper Wilcox [Sabine] gr.

*Localities*.—TEXAS: *Sabine Co.*, 1½ mi. W. of Sabinetown (type); Sabinetown Bluff, 300 feet to ¼ mi. below Sabinetown Ferry, Sabine R. ALA.: *Washington Co.*, Hatchetigbee Bluff, Tombigbee R.; *Coffee Co.*, Pea R. at Churchwell's Bridge, about



5½ mi. S. of Elba; power plant Pea R., 4 mi. below Elba; Clarke Co., 1.6 mi. S. of Bashi; about 3 mi. W. of Choctaw Corners, near Thomasville; Woods Bluff, Tombigbee R. See Gardner and Bowles, 1939, for complete localities.

*Type*.—Holotype, No. 369238 USNM

*Venericardia horatiana* Gardner, Stewart, 1930, in part. Not Gardner, 1927

See also *Venericardia stewarti* Gardner and Bowles

*Venericardia hornii* Dall, 1903a in part, not Gabb, 1864

See *Venericardia (Venericor) horatiana* Gardner

*Venericardia hornii* Gabb, Harris, 1896, not Gabb, 1864

See under *Venericardia (Venericor) mediaplata* Gardner and Bowles

### **Venericardia (Pleuromeris) inflator Meyer**

### **Carditidae**

*Venericardia inflator* Meyer, 1885a, p. 460; Meyer, 1886b, p. 84, pl. 1, fig. 26; Harris, 1919, p. 87, pl. 31, fig. 6 copy Meyer; Harris and Palmer, 1946, p. 75 in part, not pl. 17, figs. 18, 18a, 18b (= *V. inflator* var. *jacksonensis*)

*Cardita (Venericardia) inflator* Meyer, de Gregorio, 1890, p. 215, pl. 32, fig. 12 copy Meyer

*Cardita inflator* (Meyer), Cossmann, 1893, p. 14 in part under *parva* *Venericardia* (? *Cyclocardia*) *inflator* Meyer, Dall, 1903a, p. 1432

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype not USNM, 1962

### **Venericardia inflator jacksonensis Meyer**

### **Carditidae**

*Venericardia inflator* var. *Jacksonensis* Meyer, 1885a, p. 460. Not *Venericardia Jacksonensis* Conrad, 1866a *nomen nudum*; not *Venericardia parva* var. *Jacksonensis* Meyer, 1885a, p. 460

*Venericardia (Pleuromeris) inflator* Meyer, Harris and Palmer, 1946, p. 75 in part, pl. 17, figs. 18-18b (18b type); Brann and Kent, 1960, p. 957

*Range*.—Upper Eocene. Moodys Br. fm. (type), lower Jackson gr.

*Locality*.—MISS.: Hinds Co., Jackson (type); Clarke Co., Garland Cr.

*Type*.—Holotype, No. 77 GSATC

The name *Venericardia jacksonensis* is badly confused. The *V. jacksonensis* Conrad, 1866a, is a *nomen nudum*. *V. jacksonensis* Meyer, 1885a, was used twice on the same page, first as a "variety" of *V. parva* Lea and second as "variety" of *V. inflator* Meyer. Neither form was adequately described nor figured by Meyer. Both names would have been better dropped because one preoccupied the other. Only one *V. jacksonensis* Meyer can be valid. Harris (1946) figured the holotype of *V. inflator jacksonensis* Meyer under *V. inflator* Meyer. We, therefore, retain the name *jacksonensis* for that form because it has better identification as yet. If the variation or subspecies of *V. parva* designated as *jacksonensis* deserves a name, a new one for it is required. We have listed it herein as *V. (Pleuromeris) sp.*, which see.



**Venericardia intermedia** (Whitfield)**Carditidae**

*Cardita intermedia* Whitfield, 1885, p. 209, pl. 28, figs. 14, 15; Whitfield, 1899, p. 155; Weller, 1907, p. 565, pl. 62, figs. 6, 7 type; fig. 8

*Range*.—Lower Eocene. ? Vincentown fm.; Manasquan fm. (type)

*Localities*.—N.J.; Monmouth Co., Farmingdale (type); ? near Deal

*Type*.—Holotype, Columbia Univ. Coll., No. 19603 AMNH

*Venericardia jacksonensis* Conrad, 1866a, p. 23 *nomen nudum*. Not *V. parva* var. *jacksonensis* Meyer, 1885a, p. 460 or *V. inflator* var. *jacksonensis* Meyer, 1885a, p. 460; not *V. jacksonensis* (Conrad), Harris, 1894b, p. 149; not Vaughan, 1896, p. 51

*V. jacksonensis* Conrad, Dall, 1903a, p. 1424 *nomen nudum*; Harris and Palmer, 1946, p. 69 *nomen nudum*

**Venericardia (Venericor) jewelli** Gardner**Carditidae**

*Venericardia (Venericor) jewelli* Gardner, 1935, p. 158, pl. 12, figs. 1, 2; Gardner and Bowles, 1939, p. 184, pl. 42, figs. 2, 3

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Maverick Co.*, Comanche Cr. crossing on W. road to Farias near Indio Wells tank, about 29 mi. SE. of Eagle Pass (type); Bibora tank, 7 mi. E. of new Indio ranch house; 3 mi. N. of Media tank

*Types*.—Syntypes, No. 370914 USNM

**Venericardia (Venericor) klimacodes** Gardner and Bowles**Carditidae**

*Venericardia (Venericor) klimacodes* Gardner and Bowles, 1939, p. 193, pl. 37, figs. 9, 10

*Venericardia (Venericor)* cf. *klimacodes* Gardner and Bowles, Harbison, 1944, p. 4 (holotype not ANSP), pl. 2 fig. 8

*Venericardia planicosta* var. *klimacodes* Gardner and Bowles, Harris and Palmer, 1946, p. 67, pl. 16, figs. 7, 8; Brann and Kent, 1960, p. 962

*Range*.—Middle Eocene. Santee ls., upper Claiborne gr. Upper Eocene. Yazoo cl. (type), upper Jackson gr.

*Localities*.—MISS.: *Yazoo Co.*, large ravine, 1 mi. S. of Yazoo City, along street car line about ¼ mi. N. of tile plant and just below old reservoir (type). S.C.: *Berkeley Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner

*Type*.—Holotype, No. 372693 USNM

**Venericardia (Pleuromeris) leonensis** Gardner**Carditidae**

*Venericardia (Pleuromeris) leonensis* Gardner, 1927, p. 371, figs. 38, 39; Harris and Palmer, 1946, p. 74, pl. 17, figs. 22, 23 copy Gardner

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—TEXAS: *Leon Co.*, 8 mi. S. of Jewett (type)

*Type*.—Holotype, No. 369247 USNM

**Venericardia (Pleuromeris) ludvia** Harris

*Venericardia (Pleuromeris) ludvia* Harris in Harris and Palmer, 1946, p. 74

*Range*.—Upper Eocene. Jackson gr. (probably) (type)

*Locality*.—TEXAS: "Sabine R." (type)

This binomen should be regarded as a *nomen nudum*. It had no description, was not figured, and the type is lost.

*Type*.—Holotype, Harris Coll. PRI. Not figured, not found.

*Venericardia marylandica* Clark and Martin

See *Venericardia* (*Venericor*) *ascia* Rogers and Rogers

***Venericardia* (*Venericor*) *mediaplata* Gardner and Bowles      **Carditidae****

*Venericardia planicosta* Lamarck, Aldrich, 1894b, p. 242, pl. 12, fig. 3; Harris, 1896, p. 58 in part, pl. 4, fig. 13; Grabau and Shimer, 1909, p. 545, fig. 747 (left valve); Waring, 1917, p. 54. Not Lamarck, 1801, p. 123

Not *Cardita hornii* Gabb, Harris, 1896, p. 58=Calif.

*Venericardia mooreana* Conrad, Dall, 1903a, p. 1422; not Conrad, 1867c, p. 190

*Venericardia mediaplata* Gardner and Bowles, 1939, p. 168, pl. 33, figs. 1, 3; Verastegui, 1953, pp. 15, 48

*Range*.—Paleocene. Clayton fm. (type), lower Midway gr. (Ala., Miss.); Porters Cr. fm., upper Midway gr. (Tenn.); undifferentiated (Ga.), Midway gr.

*Localities*.—ALA.: *Wilcox Co.*, Prairie Cr. (type), MISS.: *Tippah Co.*, Bluff on S. side of Owl Cr., 2¾ mi. NE. of Ripley and about ¼ mi. E. of the Ripley-Troy rd. near base of formation. TENN.: *Hardeman Co.*, Porters Cr. TEXAS: *Limestone Co.*, near Horn Hill; *Maverick Co.*, White Bluff, Rio Grande R., 4 ½ mi. W. of S. of Windmill (Jacal) ranch house, GA.: *Houston Co.*, Robert Sappy's place, 4 mi. E. of Marshallville, on E. side of a branch of Spring Cr., in a ravine below negro cabins; *Clay Co.*, Fort Gaines, Chattahoochee R. limestone at base of the bluff

*Type*.—Holotype, No. 137241 USNM

***Venericardia* (*Venericor* ?) *mingoensis* Gardner and Bowles      **Carditidae****

*Venericardia mingoensis* Gardner and Bowles, Cooke, 1936, p. 44 *nomen nudum*

? *Venericardia* "*planicosta*" Cooke, 1936, pp. 43, 47, 49-51

*Venericardia* (*Venericor* ?) *mingoensis* Gardner and Bowles, 1939, p. 194, pl. 46, figs. 2, 3

*Range*.—Paleocene. Probably lower Midway, undifferentiated (type)

*Localities*.—S.C.: *Georgetown Co.*, Black R., Rhems field, 1 mi. W. of Steamboat Ldg. (type); Black R., 12 mi. NW. of Georgetown

*Type*.—Holotype, No. 372922 USNM

***Venericardia* (*Glyptoactis* ?) *moa* Gardner      **Carditidae****

*Venericardia* sp. nov. Harris, 1894b, p. 34, pl. 1, fig. 7

*Venericardia ulticostata* Con. var. Harris, 1896, p. 57 in part, pl. 5, fig. 3 copy Harris, 1894b USGS sta. 583, collector C. A. White, 1887

*Venericardia* (*Glyptoactis* ?) *moa* Gardner, 1935, pp. 157, 168, pl. 10, fig. 1; Gardner and Bowles, 1939, p. 195, pl. 46, fig. 1

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Maverick Co.*, Bibora Creek just below Bibora tank, about 18 mi. SE. of Eagle Pass (type); 3 mi. N. of Media tank; hillside above small tank, 2 mi. W. of Lopez tank,

about 29 mi. SE. of Eagle Pass; 1 mi. NW. of Indio Wells;  
White Bluff on the Rio Grande, about 4½ mi. W. of S. of  
Windmill (Jacal) ranch house  
*Type*.—Holotype, No. 370922 USNM

**Venericardia moa**, "n. subsp. ?"**Carditidae**

*Venericardia moa* Gardner new subspecies ? Gardner, 1935, p. 169

*Range*.—Paleocene. Midway gr.

*Localities*.—TEXAS: See Gardner, 1935, pp. 169, 170 for various localities

*Types*.—Unfigured specimens, No. 370912 USNM

**Venericardia monilicosta** Gabb

Not Texas as in Conrad, 1865a, p. 8; Conrad, 1866a, p. 5 (= California)

**Venericardia (Venericor) mooreana** Conrad**Carditidae**

*Venericardia mooreana* Conrad, 1867c, p. 190; Heilprin, 1891a, p. 402 ?; not Harris, 1896, p. 58 (in *V. planicosta* synonymy) = (*V. mediaplata* Gardner and Bowles); not Dall, 1903a, p. 1422 in part (= *V. mediaplata*); Stenzel, Krause, and Twining, 1957, pp. 104, 112, 113, pl. 11, fig. 4

*Venericardia densata mooreana* Conrad, Harris, 1919, p. 77, pl. 27, fig. 4; Brann and Kent, 1960, p. 962

*Range*.—Middle Eocene. Presumably Stone City beds (type), middle Claiborne gr. (see Stenzel, Krause, and Twining, 1957, p. 104)

*Locality*.—"TEXAS": Conrad [Wheelock], presumably Stone City Bluff, Brazos R. (type), *fide* Stenzel, Krause, and Twining, 1957, p. 104

*Types*.—Possible syntypes (2), No. 13243 ANSP Moore, 1962, p. 78

*Venericardia mooreana* Dall, 1903a, p. 1422 in part. Not Conrad, 1867c  
See *Venericardia (Venericor) mediaplata* Gardner and Bowles

**Venericardia (Venericor) nanaplata** Gardner and Bowles**Carditidae**

*Venericardia (Venericor) nanaplata* Gardner and Bowles, 1939, p. 169, pl. 33, figs. 2, 7

*Venericardia planicosta* Lamarck, Cooke 1926a, pl. 94, fig. 7; Semmes, 1929, fig. 59-7 not Lamarck, 1801, p. 123

*Range*.—Lower Eocene. Nanafalia fm. (type), lower Wilcox [Sabine] gr.; Tusahoma fm., middle Wilcox [Sabine] gr.

*Localities*.—ALA.: *Marengo Co.*, Nanafalia Bluff, Tombigbee R. (type); *Monroe Co.*, Greggs Ldg., Alabama R.

*Type*.—Holotype, No. 137226 USNM

**Venericardia (Venericor) nanaplata nanna** Gardner and Bowles **Carditidae**

*Venericardia (Venericor) nanaplata nanna* Gardner and Bowles, 1939, p. 169, pl. 33, figs. 4, 5, 10, 11

*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tusahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type)

*Types*.—Syntypes, No. 373028 USNM

**Venericardia (cf. Claibornicola) nasuta Dall****Carditidae**

*Venericardia nasuta* Dall, 1903a, p. 1425, pl. 53, fig. 9; Schuchert, *et al.*, 1905, p. 689; ? Kellum, 1926, p. 23, pl. 3, fig. 3

*Venericardia (Claibornicola) nasuta* Dall, Stenzel, Krause, and Twin-ing, 1957, p. 106 presumably *Claibornicola*

*Range*.—Eocene. Dall stated labelled "Midway horizon" but considered this unlikely.

*Locality*.—ALA.: "Conecuh County . . . no exact locality assigned to the type specimen", Dall, 1903a, p. 1426

*Type*.—Holotype, No. 164626 USNM

**Venericardia (?) natchitoches Harris****Carditidae**

*Venericardia natchitoches* Harris, 1919, p. 82, pl. 30, fig. 10, 13-16; F. B. Plummer, 1933, p. 811, pl. 8, figs. 6a, 6b; Verastegui, 1953, p. 43; Brann, and Kent, 1960, pp. 957, 958. Not p. 957, No. 663=*V. alticostata* Conrad

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—LA.: *Natchitoches Par.*, Natchitoches (type)

*Types*.—Syntypes, Nos. 661, 664-667 PRI

*Venericardia cf. nodifera* Kellum, Harris, 1951; not Kellum, 1926

See *Venericardia* spp.

**Venericardia ocalaedes Harris****Carditidae**

*Venericardia planicosta* var. *ocalaedes* Harris, 1951, p. 16, pl. 7, fig. 8; Brann and Kent, 1960, p. 963

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—GA.: *Houston Co.*, Georgia Lime Rock quarry about 4 mi. from Perry

*Type*.—Holotype, 24475 PRI

**Venericardia (Pleuromeris) parva Lea****Pl. 2, figs. 8, 9 Carditidae**

*Venericardia parva* Lea, 1833, p. 70, pl. 2, fig. 49; Conrad App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 107; Bronn, 1848a, p. 227; Bronn, 1848b, p. 1351; Bronn, 1849, p. 297; Tuomey, 1858, p. 268; Conrad, 1865a, p. 8; Conrad, 1866a, p. 5; not Harris, 1894b, p. 149="var."; Harris, 1895b, p. 33; Harris, 1919, p. 88, pl. 31, figs. 13-16; Harris and Palmer, 1946, p. 73; Brann and Kent, 1960, pp. 958, 959  
*Cardita parva* (Lea), d'Orbigny, 1850, p. 384; Cossmann, 1893, p. 14 in part

*Cardita (Venericardia) transversa* var. *juvenis* de Gregorio, 1890, p. 213, pl. 31, figs. 14-22

*Cardita (Venericardia) parva* Lea, de Gregorio, 1890, p. 213, pl. 32, figs. 1-4, fig. 5 copy Lea

*Venericardia (Pleuromeris) parva* Lea, Dall, 1903a, p. 1432

The original illustration of Lea is a poor representation of the description of the species. Drawings of a type by Otto Meyer are included.

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

*Localities*.—ALA.: *Monroe Co.*, base of and in Gosport sand (type) at Claiborne Bluff, Alabama R.

*Types*.—Probable syntypes, Nos. 5258, 5286 Lea Coll. ANSP



**Venericardia parva** Lea "var."**Carditidae***Venericardia parva* Lea, Harris, 1894b, p. 149*Venericardia parva* Lea "var." Vaughan, 1896, p. 51*Venericardia (Pleuromeris) parva* Lea "var." Harris and Palmer, 1946, p. 75, pl. 17, figs. 25, 26; Brann and Kent, 1960, p. 959*Range*.—Upper Eocene. Lower Jackson gr.*Localities*.—ARK.: Bradley Co., Cornish Ferry, Saline R.; Cleveland Co., Vince Ferry, Saline R.*Type*.—Figured specimen, No. 4289 PRI*Venericardia parva jacksonensis* MeyerSee *Venericardia (Pleuromeris)* sp.See also *Venericardia jacksonensis* Conrad, 1866a*Venericardia (Pleuromeris) parva symmetrica* DallSee *Venericardia diversidentata symmetrica* Dall**Venericardia (?) perantiqua** Conrad**Carditidae***Cardita subquadrata* Gabb, 1860a, p. 303, pl. 48, figs. 21 a, b [not figs. 22 a, b as in text]; not L. Lea, 1861, p. 150; not Conrad, 1848b, p. 128, pl. 14, fig. 9; not Meek, 1864, p. 11; not Gabb, 1860d, p. 395*Venericardia perantiqua* Conrad, 1865a, p. 8; Conrad, 1866a, p. 5; Conrad in Cook, 1867, p. 377, text fig.; Conrad, 1868, p. 731, not "Meek, 1868, p. 731" as in Whitfield, 1885, p. 232; Meyer and Aldrich, 1886, p. 45; Dall, 1903a, pp. 1422, 1423, not p. 1429; not *V. perantiqua* Conrad, Harris, 1896, p. 57; Harris, 1919, p. 85; Gardner 1923, p. 112*Cardita perantiqua* (Conrad), Whitfield, 1885, p. 232, pl. 30, figs. 8-10 [read in Whitfield, fig. 21 for pl. XXXI]; Scott, 1898, p. 504, pl. 11, fig. 3; Scott, 1907, pl. 16, fig. 3*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.*Localities*.—N.J.: Monmouth Co., Shark R.; near Monmouth; Farmingdale; Burlington Co. "green marl" Gabb, (type) *C. subquadrata*)*Types*.—Unknown, not listed in Moore; 1962*Venericardia perantiqua* Harris, 1896, not Conrad, 1865aSee *V. perantiqua* Conrad for Harris reference only.**Venericardia (Leuroactis) pilsbryi** Stewart**Carditidae***Venericardia pilsbryi* Stewart, 1930, p. 158, pl. 9, figs. 4, 5; pl. 10, figs. 1, 2 [Type species for section *Leuroactis*, Stewart, 1930]*Venericardia (Venericor) pilsbryi* Stewart, Gardner and Bowles, 1939, p. 175, pl. 38, figs. 9, 10*Venericardia (Leuroactis) pilsbryi* Stewart, Verastegui, 1953, p. 48*Range*.—Lower Eocene. Nanafalia fm., lower Wilcox [Sabine] gr.; Tuscahoma fm. (type), middle Wilcox [Sabine] gr.*Localities*.—ALA.: Wilcox Co., Yellow Bluff, Alabama R. (type), descent to Lower Peachtree Ferry, Alabama R.; Monroe Co., Greggs Ldg. (lower bed), Alabama R.; Bells Ldg., Alabama R.*Type*.—Holotype, No. 12510 ANSP*Venericardia planicosta* Lamarck, Aldrich, 1886 in part; Cooke, 1926a. Not *V. planicosta* Lamarck, 1801, p. 123See *Venericardia (Venericor) hatcheplata* Gardner and Bowles



- Venericardia planicosta* Lamarck, Aldrich, 1894b; Harris, 1896 in part; Grabau and Shimer, 1909 in part. Not Lamarck, 1801, p. 123  
See *Venericardia (Venericor) mediaplata* Gardner and Bowles
- Venericardia planicosta* Lamarck, Brann and Kent, 1960, p. 960, No. 133, 157 only. Not Lamarck, 1801, p. 123  
See *Venericardia (Venericor) bashiplata* Gardner and Bowles
- Venericardia planicosta* Lamarck, Brann and Kent, 1960, p. 960, Nos. 635, 636, 638, 639 only. Not Lamarck, 1801, p. 123  
See *Venericardia (Venericor) claiobolata* Gardner and Bowles
- Venericardia planicosta* Lamarck, Brann and Kent, 1960, pp. 959, 960, Nos. 130, 131, 132, 134 only. Not Lamarck, 1801, p. 123  
See *Venericardia (Leuroactis) horatiana* Gardner
- Venericardia planicosta* Lamarck, Clark, 1895 in part; Clark, 1896 in part. Not Lamarck, 1801, p. 123  
See *Venericardia (Venericor) potapacoensis* Clark and Martin
- Venericardia planicosta* Lamarck, Conrad, 1830; Conrad, 1832a, Conrad, 1865a; Clark, 1895 in part; Clark, 1896 in part. Not Lamarck, 1801, p. 123  
See *Venericardia (Venericor) regia* Conrad
- ? *Venericardia planicosta* Lamarck, Cooke, 1936. Not Lamarck, 1801, p. 123  
See *Venericardia (Venericor ?) mingoensis* Gardner
- Venericardia planicosta* Lamarck, Dana, 1863, fig. 801; 1895, p. 897, fig. 1481 same fig. as 1863. Not Lamarck, 1801, p. 123  
Probably *V. claiobolata* Gardner and Bowles, 1939 which see
- Venericardia planicosta* Lamarck, Harris, 1894b, p. 42, in part. Not Lamarck, 1801, p. 123  
See *Venericardia (Venericor) smithii* Aldrich
- Venericardia planicosta* Lamarck, Harris, 1897b in part; Waring, 1917 (as var. 5 error for  $\delta$ ) [ $\delta$ ]; Stewart, 1930. Not Lamarck, 1801, p. 123  
See *Venericardia (Venericor) bashiplata* Gardner and Bowles
- Venericardia planicosta* Lamarck, Harris, 1897b, p. 42. Not Lamarck, 1801, p. 123  
See *Venericardia* spp.
- Venericardia planicosta* Lamarck, Harris, 1899b. Not Lamarck, 1801, p. 123  
See *Venericardia (Venericor) densata pendletonensis* Gardner and Bowles
- Venericardia planicosta* Lamarck, Richards, 1948; Richards, 1950. Not Lamarck, 1801, p. 123  
See *Venericardia* spp.
- Venericardia planicosta* Lamarck, Waring, 1917. Not Lamarck, 1801, p. 123  
See *Venericardia (Leuroactis) horatiana* Gardner

*Venericardia planicosta* Lamarck "var." Harris and Palmer  
See *Venericardia* sp.

*Venericardia planicosta* Lamarck var. 5 error for  $\delta$  [delta]  
See *Venericardia* (*Venericor*) *bashiplate* Gardner and Bowles

*Venericardia planicosta* Lamarck form  $\alpha$  [alpha] Harris, 1897b, p. 54;  
Stewart, 1930, p. 157

Not specifically identified. Localities, Nanafalia, Tombigbee R. *Mar-  
engo* Co., Ala.; 4 mi. above Hamilton Bluff, Alabama R., *Monroe* Co.,  
Ala., Wilcox [Sabine] gr., Harris. Specimens unknown.

*Venericardia planicosta* Lamarck form  $\beta$  [beta] Harris, 1897b  
See *Venericardia aposmithi* Gardner and Bowles

*Venericardia planicosta* Lamarck form  $\gamma$  [gamma] Harris, 1897b in  
part; Dall, 1903a; Olsson, 1928  
See *Venericardia* (*Venericor*) *horatiana* Gardner

*Venericardia planicosta* Lamarck form  $\gamma$  [gamma], Harris, 1919  
See *Venericardia* sp.

*Venericardia planicosta* Lamarck form  $\delta$  [delta] Harris, 1897b in part;  
Harris, 1919; Dall, 1903a, p. 1422; Stewart, 1930, pp. 154, 156  
See *Venericardia* (*Venericor*) *bashiplate* Gardner and Bowles  
See also *V. (V.) hatcheplate* Gardner and Bowles  
See also *V. (V.) claiboplate* Gardner and Bowles

*Venericardia planicosta densata* (Conrad)  
See *Venericardia densata* (Conrad)

*Venericardia planicosta klimacodes* Gardner and Bowles  
See *Venericardia* (*Venericor*) *klimacodes* Gardner and Bowles

*Venericardia planicosta laticardo* Dall, 1903a not Wood, 1871  
See *Venericardia* (*Venericor*) *hatcheplate* Gardner and Bowles

*Venericardia planicosta ocalaedes* Harris  
See "*Venericardia*" *ocalaedes* Harris

*Venericardia planicosta* var. *regia* Conrad  
See *Venericardia* (*Venericor*) *regia* Conrad

*Venericardia planicosta smithi* Harris  
See *Venericardia* (*Venericor*) *hijuana* Gardner and Bowles  
See also *Venericardia* (*Venericor*) *smithi* Harris

#### ***Venericardia* (*Venericor*) *potapacoensis* Clark and Martin      **Carditidae****

*Venericardia planicosta* Lamarck, Clark, 1896, p. 80 in part, pl. 23,  
figs. 1a, 1b only; pl. 24, figs. 1a, 1b only; Veatch, 1906, pl. 14, figs.  
1, 1a, 1b, 1c copy Clark. Not Lamarck, 1801, p. 123

*Venericardia potapacoensis* Clark and Martin, 1901, p. 179, pl. 40, fig.  
4 holotype; figs. 5, 5a copies Clark, 1896, pl. 23, figs. 1a, 1b; figs. 6,  
6a copies Clark pl. 24, figs. 1a, 1b; Dall, 1903a, p. 1423; not *V. aff.*  
*potapacoensis* Clark and Martin, Dumble, 1908, p. 273; not Dum-  
ble, 1915a, p. 490; Waring, 1917, pp. 54, 96, not Harris=Clark  
and Martin; Harris, 1919, p. 77; Woods, 1922, p. 69; Stewart, 1930,  
pp. 153, 160; Rutsch, 1936a, pp. 164, 169 [not p. 167=*V. diga*  
Gardner and Bowles, 1939]; Chavan, 1936a, p. 117

*Venericardia (Venericor) potapacoensis* Clark and Martin, Gardner and Bowles, 1939, p. 180, pl. 41, figs. 3, 4, 6

*Venericor potapacoensis* (Clark and Martin), Vokes, 1961, p. 50

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—MD.: *Prince Georges Co.*, Piscataway Cr.; Upper Marlboro, gully SW. of town; 1 mi. SE. of Piscataway; *Charles Co.*, La Plata; W. of Port Tobacco (type); E. of Port Tobacco; head of Nanjemoy Cr.,  $\frac{1}{2}$  mi. below Chapel Point; 2 and  $2\frac{1}{2}$  mi. above Popes Cr.; river bluff below Popes Cr.; Potomac R. VA.; *King George Co.*, Woodstock; about  $\frac{1}{2}$ - $\frac{3}{4}$  mi. W. of Mathias Pt., Potomac R.; Potomac Cr., 50 ft. from top of bluff

*Types*.—Holotype, USNM; paratypes, ANSP

### *Venericardia praecisa* Dall

### Carditidae

*Venericardia rotunda* Lea var. Harris, 1894b, p. 149

*Venericardia praecisa* Dall, 1903a, pp. 1424, 1427, 1429, pl. 56, figs. 7, 8; Schuchert, et al., 1905, p. 689; Dall, 1916, pp. 488, 496 not Miocene; Stewart, 1930, p. 151

*Venericardia diversidentata praecisa* Dall, Harris and Palmer, 1946, p. 71, pl. 17, figs. 12-14; Brann and Kent, 1960, pp. 954, 955

*Range*.—Upper Eocene. White Bluff fm. (type), lower Jackson gr.

*Localities*.—ARK.: *Cleveland Co.*, Sta. 2232, sec. 32, T. 10 [?], R. 11 W. (type); Vince Ferry, Saline R.; near Cross Roads Church.

For further Ark. localities see Harris, 1894b

*Type*.—Holotype, No. 138638 USNM

### *Venericardia (Venericor) regia* Conrad

### Carditidae

*Venericardia planicosta* Lamarck, Conrad, 1830, p. 215; H. C. Lea, 1849, p. 107; Clark; 1895, p. 5; Clark, 1896, p. 80 in part, pl. 21, fig. 3; pl. 22, fig. 2; pl. 23, fig. 1c; pl. 24, fig. 1c; pl. 25, figs. 1a, 1b, 1c. Not Lamarck, 1801, p. 123

*Cardita planicosta* (Lamarck), Conrad, 1832a, p. 20 in part, pl. 5, fig. 2; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 107; Heilprin, 1884b, p. 87; Cossmann, 1893, p. 14; Harris, 1895b, p. 35

*Venericardia planicosta* var. *regia* Conrad, 1865a, p. 8; Conrad, 1865i, p. 364; Harris, 1894a, p. 302 in part; not Harris, 1896, p. 58; Clark and Martin, 1901, p. 178, pl. 38, figs. 1, 1a; pl. 39, figs. 1, 1a; pl. 40, figs. 1-3; Grabau and Shimer, 1909, p. 545, fig. 746; Waring, 1917, pp. 54, 55; Woods, 1922, pp. 66, 69

*Venericardia regia* Conrad, Conrad, 1866a, p. 5; Dall, 1903a, p. 1421; Stewart, 1930, pp. 154-157 in part; Rutsch, 1936a, pp. 162-164, 169, 180; Chavan, 1936a, p. 117; Chavan, 1936b, p. 166

*Cardita (Venericardia) planicosta* var. *regia* Conrad, de Gregorio, 1890, p. 214 in part, pl. 32, fig. 10 copy Conrad, 1832a

Not *Cardita regia* (Conrad), Heilprin, 1891a, p. 402

*Venericardia (Venericor) regia* Conrad, Gardner and Bowles, 1939, p. 46, figs. 8, 10 copy Clark and Martin

*Venericor regia* (Conrad), Vokes, 1961, p. 49, pl. 10, fig. 12

*Range*.—Paleocene. Aquia fm. (type)

*Localities*.—MD.: *Prince Georges Co.*, Piscataway (type); Upper Marlboro; Collington; Fort Washington; 1 mi. NE. of Piscataway; *Queen Annes Co.*, Rolphs Ldg., Chester R.; *Cecil Co.*, Fredericktown. See Clark and Martin, 1901 for further Md. localities. VA.: *Stafford Co.*, 1 mi. E. of Stafford courthouse; mouth of Potomac Cr.

*Type*.—Lectotype herein designated, specimen No. 12508 ANSP considered by Stewart, 1930, p. 154 as type. Not designated by Stewart or Gardner and Bowles, 1939, p. 187

*Venericardia regia* Conrad, Dall, 1903a in part; Stewart, 1930 in part  
See *Venericardia aposmithii* Gardner and Bowles

### **Venericardia (Venericardia) rotunda** Lea

### **Carditidae**

*Venericardia rotunda* Lea, 1833, p. 70, pl. 2, fig. 48; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 107; Conrad, 1865a, p. 8; Conrad, 1866a, p. 5; Harris, 1895b, p. 39; Dall, 1903a, pp. 1424, 1429; Harris, 1919, p. 78, pl. 29, figs. 4, 5; Rutsch, 1943, p. 156; Gardner, 1945, p. 93 in part; Harris and Palmer, 1946, p. 69, pl. 17, figs. 4, 5a, 6a; Verastegui, 1953, p. 38 ? *Glyptoactis*; Brann and Kent, 1960, p. 964

*Cardita rotunda* (Lea), Conrad, App. in Morton, 1834, p. 7; Bronn, 1848a, p. 227; Bronn, 1848b, p. 1352; Bronn, 1849, p. 297; d'Orbigny, 1850, p. 384; Tuomey, 1858, pp. 264, 273; Heilprin, 1884b, p. 86; not Heilprin, 1891a, p. 403; Cossmann, 1893, p. 14

*Cardita (Venericardia) transversa* Mut. *rotunda* (Lea), de Gregorio, 1890, p. 212, pl. 31, figs. 6-12, fig. 13 copy Lea

*Venericardia rotunda fungina* Harris, 1919, pp. 79, 80, pl. 28, figs. 4, 5; pl. 29, fig. 2; Brann and Kent, 1960, p. 964

*Venericardia rotunda funiculus* Harris, 1919, pp. 79, 80, pl. 28, figs. 6, 7; pl. 29, fig. 3; Brann and Kent, 1960, p. 964

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Probable syntypes, Nos. 5267, 5269, 5270 ANSP; syntypes *V. rotunda fungina* Harris, Nos. 641, 642, 645, PRI; syntypes *V. rotunda funiculus* Harris, Nos. 643, 644, 646 PRI

*Venericardia rotunda* Lea, F. B. Plummer, 1933. Not Lea, 1833, p. 70  
See *Venericardia rotunda coloradensis* Harris

*Venericardia rotunda* Lea var. Harris, 1894b  
See *Venericardia praecisca* Dall

### **Venericardia rotunda coloradonis** Harris

### **Carditidae**

*Venericardia (rotunda ?) coloradonis* Harris, 1919, p. 81, pl. 29, fig. 9; Brann and Kent, 1960, p. 953

*Venericardia rotunda* Lea, F. B. Plummer, 1933, p. 811, pl. 8, figs. 7a, 7b

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

*Localities*.—TEXAS: Bastrop Co., Smithville, Colorado R. (type).

LA.: Sabine Par., Sabine R., near mouth of Bayou Negreet

*Type*.—Holotype, No. 652 PRI

### **Venericardia rotunda flabellum** Harris

### **Carditidae**

*Venericardia rotunda* var. *flabellum* Harris, 1919, p. 80, pl. 29, fig. 8  
*Venericardia flabellum* Harris, F. B. Plummer, 1933, p. 811, pl. 8, figs. 8a, 8b

*Venericardia rotunda flabellum* Harris, Brann and Kent, 1960, p. 964



*Range*.—Middle Eocene. Weches. fm. (type), middle Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type)

*Type*.—Holotype, No. 651 PRI

*Venericardia rotunda fungina* Harris

See *Venericardia rotunda* Lea

*Venericardia rotunda funiculus* Harris

See *Venericardia rotunda* Lea

***Venericardia rotunda kingi* F. B. Plummer**

**Carditidae**

*Venericardia flabellum kingi* F. B. Plummer, 1933, p. 811, pl. 8, figs. 9a, 9b

*Range*.—Middle Eocene. "Crockett fm." (type); Cook Mt. fm., upper Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, Shipps Ford on Colorado R. just N. of Bastrop-Fayette Co. line

*Types*.—Syntypes, No. 21503 BEG (fig. 9a); No. 21502 BEG (fig. 9b)

*Venericardia (rotunda)* varying towards *trapaquara* Harris

See *Venericardia rotunda* Lea, subsp.

***Venericardia (Venericardia) rotunda* Lea, subsp.**

**Carditidae**

*Venericardia (rotunda)* varying towards *trapaquara* Harris, 1919, p. 80, pl. 29, figs. 6, 7; Brann and Kent, 1960, p. 965

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—MISS.: *Clarke Co.*, Wautubbee; [? Co.] "Johnson's place" (Harris Coll.)

*Types*.—Figured specimens, Nos. 649, 650 PRI

***Venericardia (Venericor) sabinensis* Barry**

**Carditidae**

*Venericardia (Venericor) sabinensis* Barry, 1942+, p. 61, pl. 7, figs. 4-9

*Venericardia sabinensis* Barry, Wasem and Wilbert, 1943, pp. 188, 192, pl. 31, fig. 10

*Range*.—Lower Eocene. Pendleton Ferry fm. (type), middle Wilcox [Sabine] gr.

*Locality*.—LA.: *Sabine Par.*, stream bed in SW.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  SE.  $\frac{1}{4}$  sec. 3, T. 5 N., R. 13 W. (type)

*Types*.—Holotype, No. 5161; paratypes, No. 5162, 5162A LSU Pal. Mus.

*Venericardia scabricostata* (Guppy), Richards and Palmer

See *Venericardia* sp.

***Venericardia (Claibornicardia) sillimani* Lea**

**Carditidae**

*Venericardia Sillimani* Lea, 1833, p. 69, pl. 2, fig. 47; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 107; Tuomey, 1858, p. 268; Conrad, 1865a, p. 8; Conrad, 1866a, p. 5; Aldrich, 1886, p. 44; Harris, 1895b, p. 42

*Cardita alticostata* Conrad, Conrad, App. in Morton, 1834, p. 7 in part; Bronn, 1848a, p. 224; Bronn, 1848b, p. 1352; Bronn, 1849, p. 297; d'Orbigny, 1850, p. 384 in part



*Cardita (Venericardia) transversa* Lea Mut. *Sillimani* Lea, de Gregorio, 1890, p. 212, pl. 31, fig. 1, copy Lea, figs. 2, 3

*Cardita (Venericardia) transversa* Lea Mut. *secans* de Gregorio, 1890, p. 212, pl. 31, figs. 4, 5; Cossmann, 1893, p. 14

*Cardita transversa* (Lea), Cossmann, 1893, p. 14 in part

*Venericardia alticostata* (Conrad), Dall, 1903a, pp. 1419, 1423, 1424 in part; Harris, 1919, p. 82, pl. 30, figs. 1, 2, not figs. 3-5; Brann and Kent, 1960, p. 951, Nos. 653, 654 only

*Venericardia (Claibornicardia) sillimani* Lea, Stenzel, Krause, and Twining, 1957, p. 110, pl. 14, figs. 1-4

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5253 ANSP [*fide* Harris notebook, 1895c]

*Venericardia simplex* (Wood), Dall, 1903a; not Wood, 1871, p. 151

See *Venericardia gulielmi* Gardner and Bowles

#### ***Venericardia (Venericor) smithii* Aldrich**

#### **Carditidae**

*Venericardia planicosta* Lamarck, Harris, 1894b, p. 42 in part. Not Lamarck, 1801, p. 123

*Venericardia smithii* Aldrich, 1894b, p. 243, pl. 12, figs. 1a, 1b; Dall, 1903a, pp. 1422, 1425; Grabau and Shimer, 1909, p. 544, fig. 747 [rt. valve] [*smithi*]; F. B. Plummer, 1933, pp. 543, 547, 551, 552, 811, 812, pl. 8, figs. 4a, 4b; Chavan, 1936a, p. 117

*Venericardia planicosta smithi* Aldrich, Harris, 1896, p. 59 in part, pl. 4, fig. 14 copy Aldrich; pl. 5, figs. 1, 2; Woods, 1922, p. 68

*Venericardia (Venericor) smithii* Aldrich, Gardner, 1935, pp. 157, 160, pl. 12, figs. 3, 4 copies syntypes; Gardner and Bowles, 1939, p. 185, pl. 43, figs. 2, 3; Shimer and Shrock, 1944, p. 419, pl. 167, fig. 15 copy Aldrich (*smithi*)

*Range*.—Paleocene. Clayton fm. (type), lower Midway gr.; Kincaid fm., lower Midway gr.; Wills Point fm., upper Midway gr.

*Localities*.—ALA.: Wilcox Co., "Prairie Creek, near Allenton, hills in and near Mr. McConnico's plantation" (type). GA.: Schley Co., Wall's Crossing, 4 mi. E. of Ellaville. See Harris, 1896 for additional localities. See Gardner and Bowles, 1939, p. 186 for Texas localities

*Types*.—Syntypes, No. 638913 USNM (figs. 1, 1a); No. 4 GSATC (fig. 1b)

#### ***Venericardia (Venericor) stewarti* Gardner and Bowles**

#### **Carditidae**

*Venericardia horatiana* Gardner, Stewart, 1930, p. 161 in part

*Venericardia (Venericor) stewarti* Gardner and Bowles, 1939, p. 178, pl. 39, figs. 4, 6, 7

*Range*.—Middle Eocene. Weches fm., middle Claiborne gr.; Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Localities*.—ALA.: Monroe Co., Lisbon Bluff, a short distance below Lisbon Ldg., Alabama R., Bed 4, Cooke sec. (type). TEXAS: Sabine Co., Sulphur Branch, near Sabinetown, Sabine R.

*Types*.—Holotype, No. 154933; paratype, No. 116027 USNM

**Venericardia (?) subquadrata (Conrad)****Carditidae**

*Cardita subquadrata* Conrad, 1848a, p. 298; Conrad, 1848b, p. 128, pl. 14, fig. 10; Conrad in Wailes, 1854, p. 287 (reprint, 1939, p. 10); Harris, 1919, p. 86. Not *Cardita subquadrata* Gabb, 1860a; Gabb, 1860d

*Venericardia subquadrata* (Conrad), Conrad, 1865a, p. 8 "A" error; "?" *subquadrata* Conrad, 1866a, p. 5; Harris, 1919, pl. 31, fig. 7 copy Conrad

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr. *Locality*.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

*Type*.—Missing ANSP Moore, 1962, p. 99

**Venericardia (?) subrotunda (Conrad)****Carditidae**

*Cardita subrotunda* Conrad, 1848a, p. 298; Conrad, 1848b, p. 129, pl. 14, fig. 11; Conrad in Wailes, 1854, p. 287 (reprint, 1939, p. 10); Harris, 1919, p. 86

*Venericardia subrotunda* (Conrad), Dall, 1903a, p. 1424; Harris, 1919, pl. 31, fig. 9 copy Conrad

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr. *Locality*.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

*Type*.—Missing ANSP Moore, 1962, p. 100

**Venericardia tetrica (Conrad)**

See *Cardita tetrica* Conrad *nomen nudum*

**Venericardia (?) texalana Gardner****Carditidae**

*Venericardia trapaquara* Harris, 1919, p. 81 in part, pl. 30, fig. 7; Brann and Kent, 1960, p. 967, No. 659 only

*Venericardia trapaquara* subsp. *texalana* Gardner, 1927, p. 370, figs. 24-27

*Venericardia texalana* Gardner, F. B. Plummer, 1933, p. 811, pl. 8, figs. 5a, 5b

*Venericardia trapaquara texalana* Gardner, Stenzel, Krause, and Twinning, 1957, p. 106 "not subspecies *V. (C.) trapaquara* Harris"

*Range*.—Middle Eocene. Weches fm. (type) (*vide* Stenzel, Krause, and Twinning), middle Claiborne gr.

*Locality*.—TEXAS: Burtleson Co., Black Shoals, Brazos R. (type) [same as Collier's Ferry *vide* Stenzel, Krause, and Twinning, 1957, p. 106]

*Type*.—Holotype, ANSP

**Venericardia (Pleuromeris) tortidens Harris****Carditidae**

*Venericardia (Pleuromeris) tortidens* Harris, 1919, p. 87, pl. 31, figs. 12, 12a, 12b; Harris and Palmer, 1946, p. 74, pl. 17, figs. 24, 27-29 copy Harris, 1919; Brann and Kent, 1960, p. 967

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; Gosport sd., uppermost Claiborne gr.

*Localities*.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type); Claiborne Bluff, Alabama R.

*Types*.—Syntypes, Nos. 672, 672a PRI

**Venericardia transversa Lea**

See *Venericardia (Claibornicardia) alticostata* (Conrad)

**Venericardia (Claibornicardia) trapaquara Harris****Carditidae**

*Venericardia trapaquara* Harris, 1895a, p. 48, pl. 1, fig. 7; 1919, p. 81 in part, pl. 30, figs. 6, 8 (type), 9 (not fig. 7=*V. texalana* Gardner); Harris and Palmer, 1946, pp. 68, 71; Brann and Kent, 1960, p. 967

*Venericardia*, n. sp. Renick and Stenzel, 1931, p. 104

*Venericardia (Claibornicardia) trapaquara* Harris, Stenzel, Krause, and Twining, 1957, p. 114, pl. 14, figs. 6-11

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Localities*.—TEXAS: *Robertson Co.*, Cedar Cr., SE. corner of Wheelock League, 200 yds. N. of Brazos Co. line (Bur. Ec. Geol. loc. No. 197-T-3) (type); *Burleson Co.*, Stone City Bluff, Brazos R.; *Houston Co.*, bluff left bank Trinity R., 0.85 mi. air-line distance N. of Alabama Ferry

*Type*.—Holotype, No. 20502 BEG

*Venericardia trapaquara texalana* Gardner

See *Venericardia* (?) *texalana* Gardner

**Venericardia (?) trapezium (Tuomey)****Carditidae**

*Cardita trapezium* Tuomey, 1853, p. 194; Dall, 1903a, p. 1424

*Range*.—Cretaceous mixed with Eocene. Near Wilmington, N.C. Cretaceous is in contact with Tertiary. (Stanton, 1891, pp. 333-334; Stephenson, 1923, p. 192; Kellum, 1926, p. 3)

*Locality*.—N.C.: *New Hanover Co.*, Wilmington (type)

*Type*.—Unknown

**Venericardia (Venericor) turneri Gardner and Bowles****Carditidae**

*Venericardia (Venericor) turneri* Gardner and Bowles, 1939, p. 179, pl. 41, figs. 1, 2

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Washington Co.*, Hatchetigbee Bluff, Tombigbee E. (type)

*Type*.—Holotype, No. 372921 USNM

**Venericardia vicksburgiana Dall****Carditidae**

*Venericardia vicksburgiana* Dall, 1903a, p. 1428, pl. 56, fig. 6; Schuchert, et al., 1905, p. 690

*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.

*Locality*.—FLA.: *Marion Co.*, Martin Sta. near Ocala (type)

*Type*.—Holotype, No. 164548 USNM

**Venericardia (?) vigintinaria (Conrad)****Carditidae**

*Cardita vigintinaria* Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 12; Conrad in Wailes, 1854, p. 287 (reprint, 1939, p. 10); Harris, 1919, p. 86

*Venericardia vigintinaria* (Conrad), Dall, 1903a, p. 1424; Harris, 1919, p. 77, pl. 31, fig. 10 copy Conrad (*vigintinaria*)

*Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

*Locality*.—S.C.: *Calhoun Co.*, "St. Matthew's Parish, Orangeburg District" (type)

*Type*.—Missing ANSP Moore, 1962, p. 109 *C. virgintinaria* [sic]

**Venericardia (?) whitei** Gardner**Carditidae**

*Venericardia alticostata* Conrad var., Harris, 1896, p. 57 in part not pl. 5, fig. 3=*V. moa*; not *Cardita alticostata* Conrad, 1833a, p. 342 as stated in Harris, 1896, p. 57

*Venericardia (alticostata) subsp. (?) whitei* Gardner, 1923, p. 112, pl. 32, fig. 3

*Venericardia whitei* Gardner, Trowbridge, 1932, pl. 31, fig. 3 copy Gardner type; Gardner, 1935, p. 166 under subgenus *Glyptoactis*

*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

*Localities*.—TEXAS: *Uvalde Co.*, bluff on Frio R.  $\frac{1}{2}$  mi. below Evans' (Myrick's) apiary (type); 11 mi. S. of Sabinal, a few hundred yards S. of the junction of Elm Cr. with Sabinal Cr.

*Type*.—Holotype, No. 352269 USNM

**Venericardia (?) wilcoxensis** Dall**Carditidae**

*Venericardia alticostata* Conrad "var." Harris, 1896, p. 58 in part, pl. 4, fig. 12 not of Conrad; Shimer and Shrock, 1944, p. 419, pl. 167, fig. 16 (*alticosta sic*) copy Harris, 1896; Brann and Kent, 1960, p. 951 No. 38 only

*Venericardia wilcoxensis* Dall, 1903a, p. 1426, pl. 54, fig. 12; Schuchert, *et al.*, 1905, p. 690; Harris, 1919, p. 84, pl. 30, fig. 11; Cooke, 1926a, pl. 93, fig. 4; Semmes, 1929, fig. 51-4; F. B. Plummer, 1933, p. 811, pl. 8, figs. 3a, 3b; Gardner, 1935, p. 163, pl. 14, fig. 1 holotype, figs. 2, 3 copy Cooke; Rutsch, 1943, p. 156; Brann and Kent, 1960, p. 968

*Venericardia wilcoxensis tripla* Dall, 1903a, p. 1426; Gardner, 1935, p. 164

*Range*.—Paleocene. Matthews Ldg. mem. (type), uppermost Porters Creek fm., upper Midway gr.

*Localities*.—ALA.: *Wilcox Co.*, Matthews Ldg., 9 mi. W. of Camden, sec. 12, T. 12 N., R. 6 E., Alabama R. (type from specimen also Schuchert, *et al.*); Dale's Br., 1 mi. NW. of Oak Hill (Gardner, 1935, not type as stated, p. 164); near Graveyard Hill

*Type*.—Holotype, No. 164542 USNM

***Venericardia wilcoxensis tripla* Dall=*V. wilcoxensis* Dall**

*Venericardia wilcoxensis tripla* Dall, 1903a, p. 1426; Gardner, 1935, p. 164

In 1903 Dall called attention to a specimen the ribs of which could be differentiated from the typical *V. wilcoxensis* and gave the name *tripla* as a "variety". The specimen so-named is available. The form does not seem to be worthy of a separate name from the species, *V. wilcoxensis*. To satisfy nomenclatorial procedure, we designate the specimen No. 129-897 USNM as the lectotype of *tripla*. Thus established, the name falls in the synonymy of *V. wilcoxensis* Dall, which see.

*Range*.—Paleocene. Naheola fm. (type), upper Midway gr.

*Locality*.—ALA.: *Wilcox Co.*, Dale's Branch near Allentown (loc. 287 USGS) (type). Also indicated as Dale's Br., 1 mi. NW. of Oak Hill P.O. (3106 USGS)

*Type*.—Lectotype *tripla*, herein designated, No. 129897 USNM



**Venericardia (?) withlacoochensis Richards****Carditidae**

*Venericardia withlacoochensis* Richards in Richards and Palmer, 1953, p. 47, pl. 10, fig. 5

*Range*.—Upper Eocene, Inglis fm. (type), lower Ocala gr.

*Locality*.—FLA.: *Levy Co.*, a rd. metal pit 2.9 mi. S. of N. limits of Gulf Hammock just SW. of State Road 55 in SW.  $\frac{1}{4}$  sec. 34, T. 14 S., R. 16 E. (type)

*Type*.—Holotype, No. I-7539 Fla. Geol. Sur.

*Venericardia*, n. sp. Renick and Stenzel, 1931

See *Venericardia* (*Claibornicardia*) *trapaquara* Harris

*Venericardia* "sp. nov." Harris, 1894b, pl. 1, fig. 7

See *Venericardia moa* Gardner and Bowles

**Venericardia sp.****Carditidae**

*Venericardia scabricostata* (Guppy), Richards and Palmer, 1953, p. 47, pl. 10, figs. 1, 2; not *Cardita scabricostata* Guppy, 1886, p. 292, pl. 18, fig. 10; not Maury, 1917 [not 1919 as in Richards and Palmer], p. 198, pl. 33, fig. 1

*Range*.—Middle Eocene. Avon Park ls., upper Claiborne gr. Upper Eocene. Inglis fm., lower Ocala gr.

*Localities*.—FLA.; *Levy Co.*, road metal pit 2.9 mi. south of north limits of Gulf Hammock, just SW. of State Road 55 in SW.  $\frac{1}{4}$  sec. 34, T. 14 S., R. 16 E.; New Lebanon dolomite pit, sec. 12, T. 16 S., R. 16 E.; dredged channel of Waccassassa R. in SW.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  sec. 8, T. 14 S., R. 16 E. below bridge on State Road 55; along Withlacoochee R. at dam of Florida Power Corp. in SW.  $\frac{1}{4}$  SW.  $\frac{1}{4}$  sec. 8, T. 17 S., R. 17 E.

*Types*.—Figured specimens, Nos. I-7533, I-7534 Fla. Geol. Sur.

**Venericardia sp.****Carditidae**

*Venericardia planicosta* Lamarck var., Richards, 1948, p. 2, pl. 1, fig. 6; Richards, 1950, pp. 14, 75, fig. 63f. Not Lamarck, 1801, p. 123

*Range*.—Middle Eocene. (? Claiborne gr.)

*Locality*.—N.C.: *Johnston Co.*, about 3 mi. W. of Clayton

*Type*.—Figured specimen, probably ANSP

**"Venericardia" sp. [yg. fide Meyer]****Carditidae**

*Micromeris senex* Meyer, 1886b, p. 81, pl. 3, fig. 22; Meyer, 1887a, p. 16 said it was a young *Venericardia*; Dall, 1903a, p. 1480 appeared to agree; Harris and Palmer, 1946, p. 78, pl. 18, fig. 19

*Astarte* (*Micromeris*) *senex* Meyer, de Gregorio, 1890, p. 200, pl. 27, fig. 30 copy Meyer

*Crassatella* (*Micromeris*) *senex* Meyer, Museum label Alabama Museum Natural History

*Range*.—Upper Eocene. "Bed g" 1st bed above *Scutella* bed, lower Jackson gr.

*Locality*.—ALA.; *Monroe Co.*, Claiborne Bluff "bed g", Alabama R.

*Type*.—Figured specimen, No. 65 GSATC



**Venericardia (Pleuromeris) sp.****Carditidae**

*Venericardia parva* var. *Jacksonensis* Meyer, 1885a, p. 460; Harris and Palmer, 1946, p. 75, pl. 17, figs. 19-21; Brann and Kent, 1960, p. 959. Not *V. Jacksonensis* Conrad, 1866a *nomen nudum*  
 Not *Venericardia inflatior* var. *Jacksonensis* Meyer, 1885a, p. 460

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Jackson

*Type*.—Holotype *V. parva jacksonensis* JHU *fide* Harris, 1946; not found USNM 1962

**Venericardia sp.****Carditidae**

*Venericardia* sp., Kellum, 1926, p. 23, pl. 3, fig. 4

*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.

*Locality*.—N.C.: *New Hanover Co.*, Wilmington

*Type*.—Figured specimen, No. 353250 USNM

**Venericardia sp.****Carditidae**

*Venericardia planicosta* Lamark "var." Harris and Palmer, 1946, p. 65, pl. 15, figs. 1-11; pl. 16, figs. 1-6, 9; Brann and Kent, 1960, pp. 960, 961

*Venericardia (Venericor) planicosta* cf. *densata* Conrad, Wilbert, 1953, p. 123, pl. 2, fig. 1

*Range*.—Upper Eocene. Lower and upper Jackson gr.

*Localities*.—ARK.: *St. Francis Co.*, Crow Cr.; *Jefferson Co.*, White Bluff, Arkansas R. MISS.: *Hinds Co.*, Jackson. LA.: *Grant Par.*, Montgomery, Red R.; *Caldwell Par.*, Bunker Hill, Ouachita R.

*Types*.—Figured specimens, Nos. 4256—4267 PRI

**Venericardia sp.****Carditidae**

*Venericardia planicosta gamma* Harris, 1919, p. 77, pl. 28, fig. 3; pl. 29, fig. 1; Brann and Kent, 1960, p. 962

*Range*.—Middle Eocene. Cook Mt. fm., [upper Lisbon fm.], upper Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.

*Type*.—Figured specimen, No. 640 PRI

**Venericardia spp.****Carditidae**

*Venericardia planicosta* Lamarck, Harris, 1897b, p. 54, pl. 9, figs. 1, 2, 3; Brann and Kent, 1960, p. 960. Not Lamarck, 1801, p. 123

*Range*.—Lower Eocene. Middle and upper Wilcox [Sabine] gr.

*Localities*.—ALA.: *Monroe Co.*, Bells Ldg., Alabama R.; *Clarke Co.*, Woods Bluff, Tombigbee R.

*Types*.—Figured specimens, Nos. 156, 157 PRI (3d specimen lost)

**Venericardia spp.****Carditidae**

*Venericardia* spp. Gardner, 1935, pp. 166, 168, 170, 171

*Range*.—Paleocene. Kincaid fm., lower Midway gr.; Wills Point fm., upper Midway gr.

*Localities*.—TEXAS: *Medina Co.*, Verde Cr., 4½ mi. NE. of Hondo; *Hunt Co.*, 14 mi. SE. of Greenville; *Bazar Co.*, Jet

Crossing, 3 mi. below Garza Crossing; *Guadalupe Co.*, Guadalupe R., 2½ mi. above power house S. of Sequin  
*Types*.—Unfigured specimens not found USNM, 1962

**Venericardia** spp.**Carditidae**

*Venericardia* cf. *nodifera* Kellum, Harris, 1951, p. 16, pl. 7, figs. 9-11;  
 Brann and Kent, 1960, p. 958. Not Kellum 1926, p. 36 Miocene

*Range*.—Upper Eocene. "Ocala ls." Ocala gr.

*Localities*.—FLA.: *Marion Co.*, E. of Kendrick; 1 mi. S. of Reddick

*Types*.—Figured specimens, 24476-24478 PRI

*Veniella decisa* Morton, Whitfield

See *Veniella* sp.

**Veniella ? rhomboidea** (Conrad)**Arcticidae**

(also placed in **Pleurophoridae**)

*Venilia ? rhomboidea* Conrad, 1853a, p. 275, pl. 24, fig. 7 (Dall reprint, 1909, p. 161)

*Veniella ? rhomdoidea* (Conrad), Whitfield, 1885, p. 215, pl. 28, figs. 12, 13 type; Johnson, 1905, p. 14; Weller, 1907, p. 538, pl. 58, figs. 22-24

*Range*.—Lower Eocene. Manasquan fm. (type)

*Locality*.—N.J.: *Ocean Co.*, near New Egypt; *Monmouth Co.*, near Farmingdale; *Burlington Co.* (type)

*Type*.—In ANSP 1905, *fide* Johnson

**Veniella** sp.**Arcticidae**

(also placed in **Pleurophoridae**)

*Veniella decisa* (Morton), Whitfield, 1885, p. 145, pl. 19, figs. 15, 16 not *Cardita decisa* Morton, 1833a, p. 292; 1833b, pl. 9, fig. 3 see Weller, 1907, p. 541; Whitfield, 1899, p. 166

*Veniella ? decisa* (Morton), Weller, 1907, p. 540, pl. 58, figs. 25-26 Whitfield's specimen

*Range*.—Paleocene. Hornerstown fm.?

*Localities*.—N.J.: ? Co., Blue-Ball; *Gloucester Co.*, I. Stratton, near Mullica Hill

*Type*.—Figured specimen, No. 7492 N.J. St. Mus. Trenton

*Venus discoidalis* (Conrad)

See *Rhadopitaria discoidalis* (Conrad)

**"Venus" [indet.] jacksonensis** Meyer**Veneridae**

*Venus jacksonensis* Meyer, 1887a, p. 12, pl. 2, fig. 4; Palmer, 1927/1929, p. 195, pl. 33, fig. 9 copy Meyer

"*Venus*" *jacksonensis* Meyer, Harris and Palmer, 1946, p. 96, pl. 21, fig. 9a copy Meyer

*Range*.—Upper Eocene. Moodys Br. fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Jackson (type)

*Type*.—Holotype, No. 638890 USNM

*Venus poulsoni* (Conrad)

See *Pitar poulsoni* (Conrad)

*Venus retisculpta* Meyer

See *Textivenus retisculpta* (Meyer)

*Venus ripleyana* Gabb

See *Pitar ripleyana* (Gabb)

*Venus subcrassa* (Lea)

See *Rhabdopitaria subcrassa* (Lea)

*Venus trigoniata* (Lea)

See *Katherinella trigoniata* (Lea)

*Venus vespertina* Conrad

See ? *Pitar vespertina* (Conrad)

### **Verticordia (Trigonulina) cossmanni** Dall

### **Verticordiidae**

"*Verticordia eocoenensis* Langdon em.", Cossmann, 1893, p. 7, pl. 1, fig. 6

*Verticordia (Trigonulina) cossmanni* Dall, 1903a, p. 1512 Eocene only; Harris and Palmer, 1946, p. 112, pl. 23, fig. 23 copy Cossmann; Stenzel, Krause, and Twining, 1957, p. 179

*Range*.—Upper Eocene. Moodys Br. fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Jackson (type)

*Type*.—Specimen figured, formerly Cossmann Coll., Lab. Geol., Sorbonne, Paris. Not present in June, 1962 *vide* M. Beauvais

### **Verticordia (Verticordia) eocensis** Langdon

### **Verticordiidae**

*Verticordia Eocensis* Langdon, 1886, p. 208 described; Aldrich, 1886, p. 40, pl. 6, fig. 13 figured; Harris, 1919, p. 182 in part, pl. 55, fig. 13 not fig. 14 copy Dall; Harris and Palmer, 1946, p. 111, pl. 23, fig. 24; Stenzel, Krause, and Twining, 1957, p. 179 *V. (Verticordia)*; Brann and Kent, 1960, p. 973

Not *Verticordia eocoenensis* Langdon em., Cossmann, 1893, p. 7, pl. 1, fig. 6 not of Langdon. See *Verticordia cossmanni*

Not *Verticordia eocoenensis* Langdon em. Dall, 1900, p. 1198, pl. 42, figs. 13, 14; Dall, 1903a, p. 1510 in part; Schuchert, *et al.*, 1905, p. 692 see *Verticordia* sp.

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type), label with Aldrich specimen. Langdon indicated Claiborne and Jackson originally. Type (Aldrich) is from Claiborne.

*Type*.—Holotype, No. 638722 USNM

"*Verticordia eocoenensis* Langdon em." Cossmann

See *Verticordia (Trigonulina) cossmanni* Dall

*Verticordia eocensis* Langdon "var." Harris, 1919

See *Verticordia* sp.

*Verticordia eocensis sotoensis* Aldrich

See *Verticordia (Trigonulina) sotoensis* Aldrich

**Verticordia (Haliris) granuloides Aldrich****Verticordiidae**

*Verticordia (Haliris) granuloides* Aldrich, 1908b, p. 75, pl. 5, fig. 10

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

*Type*.—Holotype, No. 639057 USNM

**Verticordia (Haliris) mississippiensis Dall****Verticordiidae**

*Verticordia (Haliris) mississippiensis* Dall, 1900, p. 1198, pl. 42, fig. 1; Dall, 1903a, p. 1510; Schuchert, *et al.*, 1905, p. 692; Harris, 1919, p. 181, pl. 55, fig. 9; Stenzel, Krause, and Twining, 1957, p. 179

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: Clarke Co., a cut on Southern R.R. about 0.4 mi. N. of highway overpass of U.S. Highway 11 at Wautubbee (type)

*Type*.—Holotype, No. 107453 USNM

**Verticordia (Haliris) quadrangularis (Aldrich)****Verticordiidae**

*Verticordia quadrangularis* Aldrich, 1903, p. 101, pl. 4, figs. 22, 23; Stenzel, Krause, and Twining, 1957, p. 179

*Range*.—Lower Oligocene

*Locality*.—MISS.: Wayne Co., Red Bluff (type, from label with holotype)=Hiwanee sta., Chickasawhay R.

Although this is an Oligocene species it is included in this catalogue because information has been lacking as to the locality from which it was described. The problem is solved because the label which was with the holotype in the Aldrich Coll. stated Red Bluff, Miss.

*Type*.—Holotype, No. 644634 USNM

**Verticordia (Trigonulina) satex Gardner****Verticordiidae**

*Verticordia satex* Gardner, 1927, p. 367, figs. 22, 23

*Verticordia (Trigonulina) satex* Gardner, Stenzel, Krause, and Twining, 1957, p. 178

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

*Localities*.—TEXAS: Burleson Co., Moseleys Ferry, Stone City Bluff, Brazos R. (type). LA.: Winn Par., St. Maurice; Jackson Par., in gullies N. of old Quitman-Liberty Hill rd. and W. of Madden Cr., 3.6 mi. W. on rd. from Quitman R.R. crossing, Bur. Eco. Geol. loc. No. La. 7

*Type*.—Holotype, No. 369240 USNM

**Verticordia (Trigonulina) sotoensis Aldrich****Verticordiidae**

*Verticordia sotoensis* Aldrich, 1903, p. 100, pl. 4, figs. 19-21

*Verticordia eocensis* var. *sotoensis* Aldrich, Harris, 1919, p. 182, pl. 55, fig. 10-12

*Verticordia (Trigonulina) sotoensis* Aldrich, Stenzel, Krause, and Twining, 1957, p. 178

*Range*.—Middle Eocene. (Archusa ml. mem. *vide* Stenzel, *et al*, 1957, p. 178), Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: Clarke Co., De Soto (type from type label); McLeod's mill, Suwanlovey Cr., 6 mi. W. DeSoto Station on railroad.

*Types*.—Syntypes, No. 639021 USNM (figs. 19, 20); 2 unfigured syntypes, No. 639022 USNM; fig. 21 missing, 1962

### **Verticordia sp.**

### **Verticordiidae**

*Verticordia* sp. Harris, 1896, p. 71, pl. 6, fig. 16; Stenzel, Krause, and Twining, 1957, p. 177; Brann and Kent, 1960, p. 973

*Range*.—Paleocene. Matthews Ldg. mem., uppermost Porters Cr. fm., upper Midway gr.

*Locality*.—ALA.: Wilcox Co., 1 mi. W. of Oak Hill P.O.

*Type*.—Figured specimen, lost PRI prior to 1937

### **Verticordia sp.**

### **Verticordiidae**

*Verticordia eocenensis* Langdon em. Dall 1903a, p. 1510 in part, not Langdon, pl. 42, figs. 13, 14; Schuchert, *et al*, 1905, p. 692; Harris, 1919, pl. 55, fig. 14 copy Dall

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—MISS.; Clarke Co., Wautubbee [*sic*] Wautubbee Hills

*Type*.—Figured specimen, No. 107452 USNM

### **Verticordia sp.**

### **Verticordiidae**

*Verticordia eocensis* Langdon "var." Harris, 1919, p. 182, pl. 55, figs. 15, 16; Brann and Kent, 1960, p. 973

*Range*.—Middle Eocene. Stone City beds, middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.

*Localities*.—MISS.: Newton Co., Hickory. TEXAS: Sabine Co., Outcrop 21, Sabine R. opposite SW. corner SE.  $\frac{1}{4}$  sec. 35, T. 5 N., R. 13 W.; Sabine Par., La. (Veatch Survey, 1902, p. 129)

*Types*.—Figured specimens, Nos. 1269, 1270 PRI

### **Verticordia sp.**

### **Verticordiidae**

*Verticordia (Trigonulina) dalliana* Aldrich var. Harris and Palmer, 1946, p. 112 in part, pl. 23, fig. 26 not 25; Brann and Kent, 1960, p. 973

*Range*.—Upper Eocene. Tullos mem., Yazoo cl., upper Jackson gr.

*Locality*.—LA.: Caldwell Par., Bunker Hill Ldg., Ouachita R.

*Type*.—Figured specimen, No. 4396 PRI

### **Vokesula aldrichi (Meyer)**

### **Corbulidae**

*Corbula rugosa* Lamarck, Heilprin, 1881, p. 364. Not Lamarck, 1806a, p. 467

*Corbula oniscus* Conrad, Heilprin, 1881, p. 364. Not Conrad, 1833a

*Corbula gibbosa* Lea, Heilprin, 1881, p. 364. Not Lea, 1833

*Corbula aldrichi* Meyer, 1885b, p. 67; Meyer, 1886b, p. 83, pl. 1, fig. 21; de Gregorio, 1890, p. 234, pl. 37, fig. 21 copy Meyer; Cossmann, 1893, p. 7; Clark, 1895, p. 5; Clark, 1896, p. 74; Harris, 1897b, p. 67, pl. 13, figs. 12, 13, 13a; Clark and Martin, 1901, p. 163, pl. 32, figs. 3, 3a, 4, 4a, 5, 5a, 6, 6a [not Aldrich as in reference]; Harris 1919, p. 189, pl. 57, figs. 7-9; Shimer and Shrock, 1944, p. 431, pl. 172, fig. 13, 14 copy Clark and Martin; Brann and Kent, 1960, pp. 255, 256



*Corbula (Cuneocorbula) aldrichi* Meyer, Dall, 1898b, pp. 841, 842

*Corbula (Caryocorbula) aldrichi* Meyer, Barry, 1942+, p. 73, pl. 10, figs. 2, 3; Gardner, 1945, p. 132 in part

Cf. *Vokesula aldrichi* (Meyer), Stenzel, Krause, and Twining, 1957, p. 174

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr. Md. horizons see Clarke and Martin

*Localities*.—ALA.: *Clarke Co.*, Woods Bluff, near mouth of Bashi Cr., Tombigbee R. (type); *Monroe Co.*, Greggs Ldg. Alabama R.; 4 mi. above Hamilton Bluff, Alabama R.; *Dale Co.*, Ozark; NE. *Washington Co.*, Hatchetigbee Bluff, Tombigbee R. For TEXAS and LA. localities see Barry, 1942+. For MD. localities see Clark and Martin, 1901.

*Type*.—Holotype, No. 37 GSATC

### ***Vokesula smithvillensis smithvillensis* (Harris)**

**Corbulidae**

*Corbula rugosa* Lamark, Heilprin, 1891a, p. 401. Not Lamarek, 1806a, p. 467

*Corbula aldrichi* Meyer var. *smithvillensis* Harris, 1895a, p. 52, pl. 3, figs. 5, 5a

*Corbula (Cuneocorbula) gregorioi* Cossmann, Dall, 1898b, p. 843 in part. Not Cossmann, 1893

*Corbula smithvillensis* Harris, Harris, 1919, p. 188 in part, pl. 57, figs. 12-17, not figs. 10, 11; Deussen, 1924, p. 67 in part (loc. I and N only), pl. 22, figs. 7, 7a; Renick and Stenzel, 1931, p. 107, not, p. 103; Trowbridge, 1932, pl. 41, figs. 6, 7; Brann and Kent, 1960, p. 270 in part, p. 271, not Nos. 1341, 1342 (=var. *petropolitana*)

"*Corbula*" *smithvillensis* Harris, Vokes, 1944, p. 621 "probably *Caestocorbula*"

*Corbula (Varicorbula) smithvillensis* Harris, Gardner, 1945, p. 128 in part, not pl. 9, figs. 2-4, 7-9=var. *petropolitana* Stenzel and Twining

*Vokesula smithvillensis smithvillensis* (Harris), Stenzel, Krause, and Twining, 1957, p. 174, pl. 21, figs. 11-21

*Range*.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.; Cane R. fm., middle Claiborne gr.

*Localities*.—TEXAS: *Bastrop Co.*, bluff on right bank of Colorado R. at Smithville about 625 feet downstream from the new bridge on State Highway 71 (Bur. Ec. Geol. loc. No. 11-T-2) (type); *Burleson Co.*, Burleson Shell Bluff, Brazos R.; Moseleys Ferry (Stone City Bluff), Brazos R.; *Robertson Co.*, Cedar Cr., Wheelock League; Elm Cr.; *Cherokee Co.*, 2 mi. E. of Alto; Berryman's Land; 2 mi. S. of Mt. Selman P.O.; *Gonzales Co.*, 1 mi. S. of Nevilles; *Nacogdoches Co.*, 15 mi. SE. of Nacogdoches; *Houston Co.*, Alum Bluff, Trinity R. MISS.; *Clarke Co.*, near Enterprise

*Types*.—Holotype and paratype, No. 462 Old Texas Geology Survey Coll. Holotype, No. 35498 BEG, unfigured paratypes, No. 35499 BEG

### ***Vokesula smithvillensis petropolitana* Stenzel and Twining** **Corbulidae**

*Corbula smithvillensis* Harris, Harris, 1919, p. 188 in part, pl. 57, figs. 10-11, not figs. 12-17; Deussen, 1924, p. 67 in part (loc. E, F, and P

only), not pl. 22, figs. 7, 7a; Renick and Stenzel, 1931, p. 103, not p. 107

*Corbula (Varicorbula) smithvillensis* Harris, Gardner, 1945, p. 128 in part, pl. 9, figs. 2-4, 7-9

*Vokesula smithvillensis petropolitana* Stenzel and Twining, in Stenzel, Krause, and Twining, 1957, p. 176, pl. 21, figs. 22-29; pl. 22, figs. 1-6

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.

*Locality*.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

*Types*.—Holotype No. 20624 (pl. 22, figs. 1, 2) BEG, paratypes No. 20620 (pl. 21, figs. 22, 23) BEG, No. 20621 (pl. 21, figs. 24, 25) BEG, No. 20618 (pl. 21, figs. 26, 27) BEG, No. 20619 (pl. 21, figs. 28, 29) BEG, No. 20625 (pl. 22, figs. 3, 4) BEG. Plate 22, figs. 5, 6 missing 1964

*Volsella*

See *Modiolus*

*Volsella alabamensis* (Aldrich)

See *Brachidontes alabamensis* (Aldrich)

See also *Brachidontes potomacensis* (Clark)

*Volsella (Brachidontes) cretacea* (Conrad)

See *Modiolus cretaceus* Conrad

*Volsella (Arcoperna) filosa* Conrad

See *Arcoperna filosa* Conrad

*Volsella saffordi* (Gabb)

See cf. *Brachidontes saffordi* (Gabb)

*Volsella ? tenuis* (Meyer)

See *Crenella ? tenuis* (Meyer)

*Volsella* sp.

See *Modiolus* sp.

*Vulsella ocalensis* MacNeil

See *Exputens ocalensis* (MacNeil)

**Xylophaga ? mississippiensis** Meyer and Aldrich

**Pholadidae**

*Xylophaga ? mississippiensis* Meyer and Aldrich, 1886, pp. 46, 50, pl. 2, fig. 24; Harris, 1919, p. 198, pl. 59, fig. 13 copy Meyer and Aldrich [credited Meyer only]; Dall, 1898b, p. 821 [credited Aldrich only]

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: Newton Co., Newton (type)

*Type*.—Holotype, No. 638748 USNM

*Yoldia albaria* Conrad

See *Nuculana albaria* (Conrad)

*Yoldia aldrichiana* Harris

See *Calorhadia (Litorhadia) aldrichiana* (Harris)

*Yoldia claibornensis* (Conrad)

See *Orthoyoldia claibornensis* (Conrad)

*Yoldia corpulentoides* Aldrich

See *Nuculana corpulentoides* (Aldrich)

- Yoldia cultelliformis* (Rogers and Rogers)  
See *Nuculana cultelliformis* (Rogers and Rogers)
- Yoldia eborea* (Conrad)  
See *Jupiteria* (*Ledina*) *smirna* (Dall)  
See also *Jupiteria* (*Ledina*) *jonesi* Gardner
- Yoldia kindlei* Harris  
See Cf. *Orthoyoldia kindlei* (Harris)
- Yoldia protexta* Conrad not Gabb  
See *Nuculana albaria* (Conrad)
- Yoldia psammotaea* Dall  
See *Orthoyoldia psammotaea* (Dall)
- Yoldia psammotaea* Dall, Harris, 1919  
See *Orthoyoldia* spp.
- Yoldia* (*Nuculana* ?) *psammotaea* Dall "var.", Harris and Palmer, 1946  
See *Orthoyoldia* ? spp.
- Yoldia psammotaea orangeburgensis* Harris  
See *Orthoyoldia psammotaea orangeburgensis* (Harris)
- Yoldia psammotaea* ? var. *rubamnis* Harris  
See *Orthoyoldia rubamnis* (Harris)
- Yoldia psammotaea vivianensis* Harris  
See *Orthoyoldia psammotaea vivianensis* (Harris)
- Yoldia* sp. Harris and Palmer, 1946  
See *Orthoyoldia* spp.

## AMPHINEURA

- Chiton antiquus* Conrad  
See *Chiton* (*Trachyodon*) *eocenensis* Conrad

### **Chiton** (*Trachyodon*) *eocenensis* Conrad

### **Chitonidae**

- Chiton antiquus* Conrad, App. in Morton, 1834, p. 6 name only; d'Orbigny, 1850, p. 372; Conrad, 1856aa, p. 266; Conrad, 1865a, p. 34; Conrad, 1865d, p. 212, pl. 20, fig. 7; Conrad, 1866a, p. 10; de Gregorio, 1890, p. 170, pl. 16, fig. 38 copy Conrad; Harris, 1895b, p. 5
- Chiton Eocenensis* Conrad, 1856a, p. 266; Conrad, 1865a, p. 34; Conrad, 1865d, p. 212, pl. 20, fig. 6; Conrad, 1866a, p. 10; de Gregorio, 1890, p. 170, pl. 16, fig. 39 copy Conrad; Cossmann, 1893, p. 20 *eocaenensis* [sic]; Harris, 1895b, p. 19
- Chiton* (*Trachyodon*) *eocenensis* Conrad, Dall, 1892, p. 433 type species *Trachyodon*; Schuchert, et al., 1905, p. 146; Shimer and Shrock, 1944, p. 527, pl. 216, figs. 15, 16 copies Conrad, 1865d
- For preference of specific name *eocenensis* over specific name *antiquus*, first described, see Dall, 1892, p. 434

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Holotype, *Chiton antiquus* missing ANSP Moore, 1962, p. 39. Holotype, *Chiton eocenensis* missing ANSP Moore, 1962, p.

**"Chiton" prostremus** de Gregorio**Chitonidae**

*Chiton prostremus* de Gregorio, 1890, p. 170, pl. 16, figs. 40-42

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost

*Trachyodon eocenensis* (Conrad)

See *Chiton (Trachyodon) eocenensis* Conrad

**GASTROPODA (Order PTEROPODA)****Bovicornu gracile** Meyer**Cavolinidae**

*Bovicornu gracile* Meyer, 1887a, p. 9, pl. 2, fig. 17; Collins, 1934, p. 213, pl. 9, fig. 8 type; pl. 13, fig. 4

*Meioceras eocenense* (Meyer), Dall, 1892, p. 302 in part

*Bovicornu eocenense* [sic] (Meyer), Cossmann, 1893, p. 51 Eocene of Red Bluff

*Caecum (Mioceras) gracile* (Meyer), Cossmann, 1912b, p. 155

Not *Caecum (Mioceras) eocaenense* [sic] (Meyer), Cossmann, 1912b, p. 155 Oligocene not Eocene

*Bovicornu gracile* Meyer, Harris and Palmer, 1947, p. 464, pl. 62, figs. 21, 22 copies Collins

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: Hinds Co., Jackson (type) *vide* Collins, 1934, p. 214. Not Red Bluff as stated in Meyer, 1887a, p. 9

*Type*.—Holotype, No. 638880 USNM

*Bovicornu eocenense* [sic] (Meyer)

See *Bovicornu gracile* Meyer

*Caecum*—see also in Gastropoda, Part II

*Caecum (Mioceras) corpulenta* (Meyer)

See *Clio (Creseis) corpulenta* (Meyer)

*Caecum (Mioceras) eocaenense* (Meyer), Cossmann, 1912b not Eocene

See under *Bovicornu gracile* Meyer

*Caecum (Mioceras) gracile* (Meyer)

See *Bovicornu gracile* Meyer

*Cleodora (Creseis) corpulenta* (Meyer)

See *Clio (Creseis) corpulenta* (Meyer)

*Cleodora (Creseis) elba* (de Gregorio)

See *Clio (Creseis) elba* (de Gregorio)

*Cleodora (Creseis) hastata* (Meyer)

See *Clio (Creseis) hastata* (Meyer)

*Cleodora (Creseis)* sp. cf. *hastata* (Meyer), Collins, 1934

See *Clio (Creseis)* sp.

*Cleodora (Creseis) nimba* de Gregorio

See *Clio (Creseis) nimba* (de Gregorio)

*Cleodora (Creseis) simplex* (Meyer)

See *Clio (Creseis) simplex* (Meyer)

**Clio (Creseis) corpulenta** (Meyer)**Cavolinidae**

*Styliola corpulenta* Meyer, 1887a, p. 9, pl. 2, fig. 16; Cossmann, 1893, p. 51

*Meioceras eocenense* (Meyer), Dall, 1892, p. 302 in part

*Creseis corpulenta* (Meyer), Dall, 1892, p. 430

*Caccum* (*Mioceras*) *corpulenta* (Meyer), Cossmann, 1912b, p. 155

*Cleodora* (*Creseis*) *corpulenta* (Meyer), Collins, 1934, p. 206, pl. 9, fig. 4 type; pl. 13, fig. 3

*Clio* (*Creseis*) *corpulenta* (Meyer), Harris and Palmer, 1947, p. 462, pl. 62, figs. 25, 26 2 views holotype

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Jackson (type)

*Type*.—Holotype, No. 638879 USNM

**Clio (Creseis) elba** (de Gregorio)**Cavolinidae**

*Styliola* ? *elba* de Gregorio, 1890, p. 16, pl. 17, figs. 53-55 *vide* Collins (not figs. 13-15 as in expl. pl.); Dall, 1892, p. 430 name only

*Cleodora* (*Creseis*) *elba* (de Gregorio), Collins, 1934, p. 210, pl. 12, figs. 53-55 copy De Gregorio

*Range*.—Eocene. Presumably Gosport sd. (type) uppermost Claiborne gr.

*Locality*.—Presumably ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Formerly De Gregorio Coll., Univ. of Palermo, Palermo, Sicily. Lost

**Clio (Creseis) hastata** (Meyer)**Cavolinidae**

*Styliola hastata* Meyer, 1886b, p. 78, pl. 3, fig. 11 Oligocene; de Gregorio, 1890, p. 15, pl. 17, fig. 56, fig. 57 copy Meyer as *Styliola* [*sic*]

*Creseis hastata* (Meyer), Dall, 1892, pp. 430, 432

*Cleodora* (*Creseis*) *hastata* (Meyer), Collins, 1934, p. 204, pl. 9, fig. 1; pl. 13, figs. 1, 2

*Clio* (*Creseis*) *hastata* (Meyer), Shimer and Shrock, 1944, p. 517, pl. 213, figs. 32-34 copies Collins; Harris and Palmer, 1947, p. 463

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr. (Collins). Oligocene (type)

*Localities*.—MISS.: *Hinds Co.*, near Jackson; *Clarke Co.*, Garland Cr. (Collins); *Warren Co.*, Vicksburg (type)

*Type*.—Holotype, No. 644595 USNM

**Clio (Creseis) nimba** (de Gregorio)**Cavolinidae**

*Styliola* ? *nimba* de Gregorio, 1890, p. 16, pl. 17, figs. 46-51; Dall, 1892, p. 430 name only

*Cleodora* (*Creseis*) *nimba* (de Gregorio), Collins, 1934, p. 209, pl. 12, figs. 46-51

*Range*.—Eocene. Presumably Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—Presumably ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Formerly De Gregorio Coll., Univ. of Palermo, Palermo, Sicily. Lost



**Clio (Creseis) simplex (Meyer)****Cavolinidae**

*Styliola simplex* Meyer, 1886b, p. 78, pl. 3, fig. 10; Cossmann, 1893, p. 51

*Creseis simplex* (Meyer), Dall, 1892, p. 430

*Cleodora (Creseis) simplex* (Meyer), Collins, 1934, p. 207, pl. 9, fig. 5 type; pl. 13, fig. 6

*Clio (Creseis) simplex* (Meyer), Harris and Palmer, 1947, p. 463, pl. 62, figs. 23, 24 two views holotype

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: *Hinds Co.*, Moodys Branch, Jackson (type)

*Type*.—Holotype, No. 638841 USNM

**Clio (Creseis) sp.****Cavolinidae**

*Creseis* sp. Aldrich, 1895b, p. 5, pl. 1, fig. 5

*Cleodora (Creseis)* sp. cf. *hastata* (Meyer), Collins, 1934, p. 205, pl. 9, fig. 2

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—TEXAS: *Robertson Co.*, Wheelock

*Type*.—Figured specimen not found USNM 1963

*Creseis corpulenta* (Meyer)

See *Clio (Creseis) corpulenta* (Meyer)

*Creseis elba* (de Gregorio)

See *Clio (Creseis) elba* (de Gregorio)

*Creseis hastata* (Meyer)

See *Clio (Creseis) hastata* (Meyer)

*Creseis nimba* (de Gregorio)

See *Clio (Creseis) nimba* (de Gregorio)

*Creseis simplex* (Meyer)

See *Clio (Creseis) simplex* (Meyer)

*Creseis* sp. Aldrich, 1895b

See *Clio (Creseis)* sp.

**Limacina choctavensis (Aldrich)****Limacinidae**

*Physa choctavensis* Aldrich, 1887, p. 83

*Spirialis choctavensis* (Aldrich), Aldrich, 1895b, p. 5, pl. 2, fig. 10; Harris, 1899a, p. 103, pl. 12, fig. 24; Brann and Kent, 1960, p. 807

*Limacina choctavensis* (Aldrich), Collins, 1934, p. 176, pl. 7, fig. 2 type

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Choctaw Corner (type)

*Types*.—Syntypes, No. 638860 USNM (Aldrich, 1895b, pl. 2, fig. 10); No. 638861 (3 unfigured specimens); No. 638863 (1 unfigured specimen presumably one of Aldrich's original 5 syntypes)

**Limacina elongatoidea (Aldrich)****Limacinidae**

*Physa elongatoidea* Aldrich, 1887, p. 83

*Spirialis elongatoidea* (Aldrich), Aldrich, 1895b, p. 5, pl. 2, fig. 9; Harris, 1899a, p. 103, pl. 12, fig. 25 holotype

*Limacina elongatoides* [sic] (Aldrich), Collins, 1934, p. 177, pl. 7, fig. 1 type

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Choctaw Corner (type)

Type.—Holotype, No. 638862 USNM

*Meioceras*—see also in Gastropoda, Part II

*Meioceras eocenense* (Meyer), Dall, 1892 in part

See *Bovicornu gracile* Meyer

See also *Clio* (*Creseis*) *corpulenta* (Meyer)

*Mioceras*

See *Meioceras*

*Mioceras corpulenta* Meyer

See *Clio* (*Creseis*) *corpulenta* (Meyer)

*Mioceras eocaenense* (Meyer)

See *Bovicornu gracile* Meyer

*Mioceras gracile* (Meyer)

See *Bovicornu gracile* Meyer

*Physa*—see also in Gastropoda, Part II

*Physa choctavensis* Aldrich

See *Limacina choctavensis* (Aldrich)

*Physa elongatoidea* Aldrich

See *Limacina elongatoidea* (Aldrich)

*Spiralis choctavensis* (Aldrich)

See *Limacina choctavensis* (Aldrich)

*Spiralis elongatoidea* (Aldrich)

See *Limacina elongatoidea* (Aldrich)

## **Spiratella augustana** Gardner

## **Limacinidae**

*Spiratella augustana* Gardner, 1951, p. 10, fig. 2

Range.—Middle Eocene. Tallahatta fm. (type), lower Claiborne gr.

Locality.—ALA.: Clarke Co., between 15-20 ft. below contact of Tallahatta and Lisbon fms. and 4 ft. above stream bed of Little Stave Cr.,  $4\frac{1}{2}$  mi. N. of Jackson (type)

Type.—Holotype, No. 560589 USNM

*Styliola corpulenta* Meyer

See *Clio* (*Creseis*) *corpulenta* (Meyer)

*Styliola* ? *elba* de Gregorio

See *Clio* (*Creseis*) *elba* (de Gregorio)

*Styliola hastata* Meyer

See *Clio* (*Creseis*) *hastata* (Meyer)

*Styliola* ? *nimba* de Gregorio

See *Clio* (*Creseis*) *nimba* (de Gregorio)

*Styliola simplex* Meyer

See *Clio* (*Creseis*) *simplex* (Meyer)

**Tibiella marshi Meyer****Cavolinidae**

*Tibiella Marshi* Meyer, 1884, p. 110, text fig.; Dall, 1892, p. 432; Collins, 1934, p. 226, pl. 14, fig. 1 type  
 ? *Tibiella marshalli* [sic], Meyer, Zilch, 1959, p. 49, fig. 165 error for *marshi*

*Range*.—Middle Eocene. Gosport sd (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Not in Aldrich Coll. USNM fide Wilson, 1963 (pers. com.)

**"Tibiella" texana Collins****Cavolinidae**

*"Tibiella" texana* Collins, 1934, p. 227, pl. 14, figs. 2-5

*Range*.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

*Locality*.—TEXAS: Bastrop Co., Smithville, Colorado R. (type)

*Type*.—Holotype, No. 644568 USNM

## SCAPHOPODA

*Antalis arciforme* (Conrad)

See *Dentalium* (*Antalis*) *arciforme* Conrad

*Antalis blandum* de Gregorio

See *Dentalium* (*Antalis*) *blandum* de Gregorio

*Antalis danvillense* Palmer

See *Dentalium* (*Antalis*) *danvillense* Palmer

*Antalis minutistriatum* (Gabb)

See *Dentalium* (*Antalis*) *minutistriatum* Gabb

*Antalis mississippiense jacksonense* Palmer

See *Dentalium* (*Antalis*) *mississippiense jacksonense* Palmer

*Antalis thalloides* (Conrad)

See *Dentalium* (*Antalis*) *thalloides* Conrad

*Antalis thalloides claibornense* Palmer

See *Dentalium* (*Antalis*) *thalloides claibornense* Palmer

*Antalis vincense* Palmer

See *Dentalium* (*Antalis*) *vincense* Palmer

**Cadulus (Dischides) abruptus Meyer and Aldrich** **Siphonodentaliidae**

*Cadulus abruptus* Meyer and Aldrich, 1886, p. 40, pl. 2, figs. 2; Dall, 1892, p. 444 in part; Aldrich, 1895b, p. 4 in part, not pl. 1, figs. 1, 2 [labelled *C. subcoarctatus* Gabb var.] (= *Cadulus* sp.); Pilsbry and Sharp, 1898, p. 235 [erroneous age given]; Harris, 1899a, p. 5 in part not, pl. 1, fig. 3 (= *Cadulus* sp.); Clark and Martin, 1901, p. 159 in part, not pl. 29, fig. 9 (= *C. bellulus* Clark); Shimer and Shrock, 1944, p. 523 in part, not pl. 214, fig. 29 copy Clark and Martin (= *C. bellulus*); not Brann and Kent, 1960, p. 147 (= *Cadulus* sp.)

*Cadulus* ("Dischides") *abruptus* Meyer and Aldrich, Palmer, 1937, p. 25 in part, pl. 2, figs. 15, 16, 23-25; Le Blanc, 1942+, p. 79 in part, not pl. 12, fig. 1; Brann and Kent, 1960, p. 147

*Range*.—Lower Eocene. Sabinetown fm., upper Wilcox [Sabine] gr. (Le Blanc). Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: Newton Co., Newton (type); Indian Mound, 3 mi. E. of Newton; Hickory; Clarke Co., Wautubbee. ALA.: Monroe Co., Lisbon Ldg., Alabama R. TEXAS: Sabine Co., bluff  $\frac{1}{4}$  mi. downstream from Sabinetown Ferry ldg. (Le Blanc)

*Type*.—Holotype, No. 638725 USNM

*Cadulus abruptus* Meyer and Aldrich, Clark and Martin, 1901 in part.  
Not Meyer and Aldrich, 1886

See *Cadulus bellulus* Clark

*Cadulus abruptus* Meyer and Aldrich, Clark and Martin, 1901 in part.  
Not Meyer and Aldrich, 1886

See *Cadulus* sp.

*Cadulus abruptus* Meyer and Aldrich, Harris, 1899a. Not Meyer and Aldrich, 1886

See *Cadulus* sp.

#### ***Cadulus aldrichi* Gardner**

#### **Siphonodentaliidae**

Not *Cadulus subcoarctatus* [sic] Gabb, Aldrich, 1895b, p. 4 as in Gardner, 1935, p. 200

Not *Cadulus abruptus* Meyer and Aldrich, Harris, 1899a, p. 5 as in Gardner, 1935, p. 200

*Cadulus aldrichi* Gardner, 1935, p. 200, pl. 20, fig. 1

*Range*.—Paleocene. Wills Point fm. (type), upper Midway gr.

*Localities*.—TEXAS: Bexar Co., USGS Sta. No. 8245, Salado Creek, 5.3 mi. SE. of San Antonio (type); Bastrop Co., 3 mi. SW. of Cedar Creek P.O.

*Type*.—Holotype, No. 373066 USNM

#### ***Cadulus bellulus* Clark**

#### **Siphonodentaliidae**

*Cadulus bellulus* Clark, 1895, p. 5; Clark, 1896, p. 72, pl. 14, fig. 6; Pilsbry and Sharp, 1898, p. 235

*Cadulus abruptus* Meyer and Aldrich, Clark and Martin, 1901, p. 159, pl. 29, fig. 9; Shimer and Shrock, 1944, p. 523 in part, pl. 214, fig. 29 copy Clark and Martin. Not *C. abruptus* Meyer and Aldrich, 1886, p. 40

*Range*.—Lower Eocene. Nanjemoy fm. (type)

*Localities*.—VA.: King George Co., Woodstock (type). MD.: Charles Co., head of Nanjemoy Cr.; E. and W. of Port Tobacco;  $1\frac{1}{2}$  and  $2\frac{1}{2}$  mi. above Popes Cr.; Prince Georges Co., 1 mi. SE. of Piscataway; Upper Marlboro (deep cut near Chesapeake Beach R. R. station); Calvert Co., well at Chesapeake Beach

*Type*.—Holotype, USNM

*Cadulus compressus* Meyer, 1885, p. 463 Jackson; Dall, 1892, p. 444 is a *nomen nudum*

#### ***Cadulus depressus* Meyer**

#### **Siphonodentaliidae**

*Cadulus depressus* Meyer, 1884, p. 111 text fig.; Dall, 1892, p. 444; Pilsbry and Sharp, 1898, p. 236; Aldrich, 1895b, p. 4; Palmer, 1937, p. 26, pl. 2, fig. 17 copy Meyer

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638695 USNM

**Cadulus (Polyschides) jacksonensis Meyer**

**Siphonodentaliidae**

*Cadulus jacksonensis* Meyer, 1885a, p. 462; Meyer, 1886b, p. 65, pl. 3, figs. 8, 8a, 8b; Dall, 1892, p. 444; Aldrich, 1895b, p. 4 under *newtonensis*

*Cadulus newtonensis* Meyer and Aldrich, Dall, 1892, p. 444 in part; Pilsbry and Sharp, 1898, p. 237 (*Polyschides*) in part

*Siphonodentalium* ? *jacksonense* (Meyer), Cossmann, 1893, p. 20

Cf. *Cadulus jacksonensis* Meyer, Harris, 1894b, p. 157

*Cadulus (Polyschides) jacksonensis* Meyer, Harris and Palmer, 1947, p. 216, pl. 26, figs. 1-6

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: Hinds Co., Jackson (type)

*Types*.—Syntypes (2), No. 638704 USNM

**Cadulus juvenis Meyer**

**Siphonodentaliidae**

*Cadulus juvenis* Meyer, 1886b, p. 66, pl. 3, fig. 4; Dall, 1892, p. 444; Aldrich, 1895b, p. 4; Pilsbry and Sharp, 1898, p. 237

*Gadus juvenis* (Meyer), Cossmann, 1893, p. 20

Cf. *Cadulus juvenis* Meyer, Harris, 1894b, p. 157

*Cadulus (Cadulus) juvenis* Meyer, Harris and Palmer, 1947, p. 216, pl. 26, fig. 14 copy Meyer

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: Hinds Co., Jackson (type)

*Type*.—Holotype, No. 638814 USNM

**Cadulus (Polyschides) newtonensis Meyer and Aldrich**

**Siphonodentaliidae**

*Cadulus newtonensis* Meyer and Aldrich, 1886, p. 40, pl. 2, figs. 3, 3a, 3b as *Cadulus* sp.; Dall, 1892, p. 444 in part; Aldrich, 1895b, p. 4

*Cadulus (Polyschides) newtonensis* Meyer and Aldrich, Pilsbry and Sharp, 1898, p. 237 in part [age of Newton and Jackson, Miss., erroneous]; Palmer, 1937, p. 22, pl. 2, figs. 39, 40 copies Meyer and Aldrich

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—MISS.: Newton Co., Newton (type); Clarke Co., Wautubbee

*Types*.—Syntypes (2), No. 638727 USNM

*Cadulus newtonensis* Meyer and Aldrich, Dall, 1892. Not Meyer and Aldrich, 1886

See also *Cadulus (Polyschides) jacksonensis* Meyer

**Cadulus (Cadulus) ouachitensis Palmer**

**Siphonodentaliidae**

*Cadulus (Cadulus) ouachitensis* Palmer, 1937, p. 21, pl. 2, figs. 18, 19; Brann and Kent, 1960, p. 148

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—LA.: Ouachita Par., Lapiniere Ldg., Ouachita R. (type). TEXAS: Sabine Co., Columbus

*Types*.—Syntypes, Nos. 2644, 2645 PRI



**Cadulus (Polyschides) margarita** Palmer**Siphonodentaliidae**

*Cadulus (Polyschides) quadriturritus* Meyer, Palmer, 1937, p. 24 in part Jackson Eocene. Not Meyer, 1886b, p. 65 Oligocene  
*Cadulus (Polyschides) margarita* Palmer in Harris and Palmer, 1947, p. 217, pl. 26, figs. 8-11; Brann and Kent, 1960, p. 148

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Moodys Branch (type), Jackson; *Caldwell Par.*, Gibson Ldg., Ouachita R. TEXAS: *Sabine Co.*, 1 mi. below Robinsons Ferry, Sabine R.; Sabine R. opposite center sec. 6, T. 3 N., R. 12 W., Sabine Par., La. Outerop 30 (Veatch, 1902, pp. 131, 132)

*Types*.—Holotype, No. 4483; paratype, No. 4484 PRI

**Cadulus phoenicea** Gardner**Siphonodentaliidae**

*Cadulus phoenicea* Gardner, 1935, p. 199, pl. 20, fig. 2

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.

*Locality*.—TEXAS: *Bastrop Co.*, USGS Sta. 5282, clay from bluff at Webberville (type)

*Type*.—Holotype, No. 370996 USNM

*Cadulus quadriturritus* Meyer, Palmer, 1937

See *Cadulus (Polyschides) margarita* Palmer (Jackson Eocene)

See also *Cadulus* sp. (Claiborne Eocene)

**Cadulus (Dischides) subcoarctatus** (Gabb)**Siphonodentaliidae**

*Ditrupa subcoarctata* Gabb, 1860d, p. 386, pl. 67, fig. 47

*Gadus subcoarctatus* [sic] (Gabb), Conrad, 1866a, p. 10

*Cadulus subcoarctatus* [sic] (Gabb), Dall, 1892, p. 444; Aldrich, 1895b, p. 4

*Cadulus subcoarctatus* (Gabb), Pilsbry and Sharp, 1898, p. 238

*Cadulus (Dischides) subcoarctatus* (Gabb), Palmer, 1937, p. 24, pl. 2, fig. 26; pl. 78, fig. 1 holotype; Brann and Kent, 1960, p. 148

*Range*.—Middle Eocene. Wheelock mem. (type), Cook Mt. fm., upper Claiborne gr.

*Localities*.—TEXAS: *Robertson Co.*, Town Branch of Cedar Creek near Wheelock (type) (*fide* Stenzel, Krause, and Twining, 1957, p. 11); *Burleson Co.*, Stone City Bluff, Brazos R.; *Bastrop Co.*, Little Brazos R., 2½ mi. above Stone City. *Sabine Co.*, Columbus, Sabine R.; Sabine R. opposite SW. corner SE. ¼ sec. 35, T. 5 N., R. 13 W. Sabine Par., La. Outerop 21 (Veatch, 1902, p. 129)

*Type*.—Holotype, No. 13263 ANSP

*Cadulus subcoarctatus* [sic] (Gabb) var. Aldrich, 1895b

See *Cadulus* spp.

See also under *Cadulus aldrichi* Gardner

**Cadulus turgidus** Meyer**Siphonodentaliidae**

*Cadulus turgidus* Meyer, 1886b, p. 65, pl. 1, fig. 10; Dall, 1892, p. 444; Aldrich, 1895b, p. 5; Harris, 1896, p. 73, pl. 7, fig. 2; Pilsbry and Sharp, 1898, p. 239; Gardner, 1935, p. 199; Shimer and Shrock, 1944, p. 523, pl. 214, fig. 26 copy Harris; Brann and Kent, 1960, p. 148

*Siphonodentalium (Cadulus ?) turgidus* Meyer, de Gregorio, 1890, p. 173, pl. 17, fig. 44 copy Meyer

*Range*.—Paleocene. Matthews Ldg. beds (type), uppermost Porters Cr. fm., upper Midway gr.

*Localities*.—ALA.: Wilcox Co., Matthews Ldg., Tombigbee R. (type); 1 mi. W. of Oak Hill; Dales Branch. TEXAS: *Bastrop Co.*, USGS Stas. 11696 and 11914, Colorado R., 4 mi. below Webberville; USGS Sta. 11890, Colorado R., 2 mi. below Travis Co. line (Gardner)

*Type*.—Holotype, No. 638813 USNM

**Cadulus (Polyschides) turritus (I. Lea)**

**Siphonodentaliidae**

*Dentalium turritum* I. Lea, 1833, p. 35, pl. 1, fig. 3; H. C. Lea, 1849, p. 99; Conrad, 1865a, p. 34; Conrad, 1866a, p. 10; de Gregorio, 1890, p. 172 in part, pl. 17, cf. figs. 35, 36; figs. 39, 40 copies Lea; Cossmann, 1893, p. 19 in part; Harris, 1895b, p. 46

*Cadulus turritus* (I. Lea), Dall, 1892, p. 444; Aldrich, 1895b, p. 4  
*Cadulus (Polyschides) turritus* (I. Lea), Pilsbry and Sharp, 1898, p. 239; Palmer, 1937, p. 22, pl. 78, fig. 2 holotype

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 5015 ANSP

*Cadulus* sp., Meyer and Aldrich, 1886

See *Cadulus newtonensis* Meyer and Aldrich

**Cadulus sp.**

**Siphonodentaliidae**

*Cadulus quadriturritus* Meyer, Palmer, 1937, p. 23 in part, pl. 2, figs. 13, 14; not Meyer, 1886b Oligocene

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—LA.: Ouachita Par., Lapiniere Ldg., E. bank Ouachita R.

*Type*.—Figured specimen, No. 2646 PRI

**Cadulus sp.**

**Siphonodentaliidae**

*Dentalium gnizum* de Gregorio, 1890, p. 173, pl. 17, figs. 42, 43; Pilsbry and Sharp, 1898, p. 205 suggested a *Cadulus*; Dall, 1892, p. 438; Cossmann, 1893, p. 19; Palmer, 1937, p. 27

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost

**Cadulus sp.**

**Siphonodentaliidae**

*Cadulus* sp. Vaughan, 1896, p. 51

*Range*.—Upper Eocene. Jackson gr.

*Locality*.—LA.: Catahoula Par., 2 mi. N. of Rosefield

*Type*.—Unfigured specimen, presumably USNM

**Cadulus sp.**

**Siphonodentaliidae**

*Cadulus subcoarctatus* [sic] Gabb "var." Aldrich, 1895 b, p. 4, pl. 1, figs. 1, 2. Not Gabb, 1860d, p. 386

*Range*.—Lower Eocene. Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: Monroe Co., Greggs Ldg., Alabama R.

*Type*.—Figured specimen (fig. 2), No. 638923 USNM

**Cadulus sp.****Siphonodentaliidae**

*Cadulus subcoarctatus* [sic] Gabb "var." Aldrich, 1895b, p. 4, pl. 1, fig. 4. Not Gabb, 1860d, p. 386

*Cadulus abruptus* Meyer and Aldrich, Harris, 1899a, p. 5 in part, pl. 1, fig. 3; Le Blanc, 1942+, p. 79, pl. 12, fig. 1; Brann and Kent, 1960, p. 147 No. 303 only. Not Meyer and Aldrich, 1886, p. 40

*Range*.—Lower Eocene. Bashi mem, Hatchetigbee fm., upper Wilcox [Sabine] gr.; Sabinetown fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R.; 1½ mi. WSW. Choctaw Corner; *Monroe Co.*, 4 mi. below Hamilton Bluff, Alabama R. TEXAS: *Sabine Co.*, bluff ¼ mi. downstream Sabinetown Ferry Ldg., Sabine R.

*Types*.—Figured specimen, not USNM; figured specimens, No. 303 PRI (Harris); No. 6047 LSU Pal. Mus. (LeBlanc)

**Cadulus sp.****Siphonodentaliidae**

*Cadulus abruptus* Meyer and Aldrich, Clark and Martin, 1901, pp. 159, 160 in part. Not Meyer and Aldrich, 1886, p. 40

*Cadulus bellulus* Clark, Clark and Martin, 1901, pp. 159, 160. Not Clark, 1895 nor Clark, 1896.

*Range*.—Paleocene. Aquia fm.

*Localities*.—VA.: *Stafford Co.*, Aquia Cr. MD.: *Charles Co.*; Liverpool Point; Clifton Beach; *Prince Georges Co.*, 1 mi. NE. of Piscataway

*Types*.—Unfigured specimens, USNM

*Dentalium alternatum* I. Lea

See *Dentalium (Antalis) thalloides* Conrad

**Dentalium annulatum** Meyer**Dentaliidae**

*Dentalium annulatum* Meyer, 1886b, p. 64, pl. 1, fig. 1; de Gregorio, 1890, p. 173, pl. 17, fig. 45 copy Meyer; Dall, 1892, p. 438; Cossmann, 1893, p. 19; Pilsbry and Sharp, 1898, p. 198. Not *D. annulatum* Gmelin, 1791, p. 3738 [not 1788 as in Palmer, 1937]; not *D. annulatum* Sandberger, 1842, p. 399 *nomen nudum*; not *Entalis annulatum* Tate, 1887, p. 191; not *Entaliopsis annulata* Newton and Harris, 1894, p. 67

*Dentalium "annulatum"* Meyer, Palmer, 1937, p. 19, pl. 2, fig. 37 copy Meyer

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 638812 USNM

**Dentalium (Antalis) arciforme** Conrad**Dentaliidae**

*Dentalium arciforme* Conrad, 1846b, p. 212, pl. 1[2], fig. 3; H. C. Lea, 1849, p. 99; Dall, 1892, p. 438; Pilsbry and Sharp, 1898, p. 199

*Dentalium leai* Meyer, 1885a, p. 462; Meyer, 1886b, p. 63, pl. 1, figs. 2, 2a

*Dentalium turritum* Lea, de Gregorio, 1890, p. 172 in part, pl. 17, figs. 37, 38 copy *Leai* Meyer; fig. 41 copy *arciforme* Conrad

*Dentalium (Antalis) arciforme* Conrad, Palmer, 1937, p. 16, pl. 1, figs. 12-14; fig. 15 copy Conrad; Brann and Kent, 1960, p. 316

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Missing ANSP *vide* Palmer, 1937, p. 16; verified Moore, 1962, p. 39. Holotype *D. Leai* Meyer, No. 638702 USNM

*Dentalium asgum* de Gregorio and var. *tirpum* de Gregorio  
See *Dentalium (Antalis) thalloides* Conrad

*Dentalium bi-formis* Tuomey, 1858, pp. 265, 269 *nomen nudum*

*Dentalium bimixtum* de Gregorio  
See *Dentalium (Antalis) thalloides* Conrad

**"Dentalium bitubatum" Meyer**

**Dentaliidae**

*Dentalium bitubatum* Meyer, 1886b, p. 64, pl. 3, fig. 1; Dall, 1892, p. 438; Cossmann, 1893, p. 20; Pilsbry and Sharp, 1898, p. 200

"*Dentalium bitubatum*" Meyer, Harris and Palmer, 1947, p. 215, pl. 26, fig. 7 copy Meyer

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Locality*.—MISS.: Hinds Co., Jackson (type)

*Type*.—Holotype, No. 638811 USNM

**Dentalium (Antalis) blandum de Gregorio**

**Dentaliidae**

*Dentalium blandum* de Gregorio, 1890, p. 172, pl. 17, figs. 26-31; Dall, 1892, p. 438; Cossmann, 1893, p. 19; Pilsbry and Sharp, 1898, p. 200

*Dentalium (Antalis) blandum* de Gregorio, Palmer, 1937, pp. 15, 18, pl. 1, figs. 9, 10; Brann and Kent, 1960, pp. 316, 317

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Formerly De Gregorio Coll., Univ. of Palermo, Palermo, Sicily. Lost

**Dentalium Danai Meyer**

See *Fustiaria (Laevidentalium) danai* (Meyer)

**Dentalium (Antalis) danvillense Palmer**

**Dentaliidae**

*Dentalium (Antalis) danvillense* Palmer in Harris and Palmer, 1947, p. 210, pl. 26, figs. 23-27; Brann and Kent, 1960, pp. 317, 318

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.; Danville Ldg. beds (type), uppermost Jackson gr.

*Localities*.—LA.: Catahoula Par., Danville Ldg., Ouachita R. (type); Carters Ldg., Ouachita R. MISS.: Hinds Co., Town Creek, Jackson

*Types*.—Holotype, No. 4472; paratypes, Nos. 4473-4476 PRI

**Dentalium densatum Conrad**

**Dentaliidae**

*Dentalium densatum* Conrad, 1865d, p. 212, pl. 20, fig. 15; Palmer, 1937, p. 14, pl. 1, fig. 3 copy Conrad

*Range*.—Not known.

*Locality*.—Not indicated by Conrad, 1865

*Type*.—Holotype, missing ANSP, Moore, 1962, p. 54. Present Palmer, 1937, p. 15



**Dentalium eugenii** Dall**Dentaliidae**

*Dentalium Eugenii* Dall, 1892, pp. 438, 442; Pilsbry and Sharp, 1898, p. 203

*Range*.—Paleocene. Midway gr. (type)

*Locality*.—ALA.: Wilcox Co., Prairie Creek (type)

*Type*.—Holotype, No. 112631 USNM

*Dentalium gnizum* de Gregorio

See *Cadulus* sp.

**Dentalium incisissimum** Meyer and Aldrich**Dentaliidae**

*Dentalium incisissimum* Meyer and Aldrich, 1886, p. 40, pl. 2, fig. 1; Dall, 1892, p. 439; Pilsbry and Sharp, 1898, p. 206; Palmer, 1937, p. 19, pl. 1, fig. 4 as *Dentalium* sp., fig. 6 copy Meyer and Aldrich; Brann and Kent, 1960, p. 318

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: Clarke Co., Wautubbee (type)

*Type*.—Holotype, No. 638724 USNM

*Dentalium leai* Meyer

See *Dentalium* (*Antalis*) *arciforme* Conrad

**Dentalium mediaviense** Harris**Dentaliidae**

*Dentalium minutistriatum* Dall, 1892, p. 438 in part. Not Gabb, 1860d, p. 386

*Dentalium mediaviense* Harris, 1896, p. 73, pl. 7, figs. 1, 1a; Pilsbry and Sharp, 1898, p. 209; Gardner, 1935, p. 197; Brann and Kent, 1960, p. 319

*Dentalium* (*Graptacme*) *mediaviense* Harris, Shimer and Shrock, 1944, p. 523, pl. 214, figs. 24, 25 copies Harris, 1896

*Range*.—Paleocene. Lower Midway gr.; upper Midway gr. (type)

*Localities*.—MISS.: Tippah Co.,  $\frac{1}{2}$  mi. N. of Ripley. ALA.: Wilcox Co.,  $\frac{1}{2}$  mi. W. of Graveyard Hill (type); ? Dales Branch; 1 mi. N. of Allenton; Sumter Co., Black Bluff. TEXAS; See Gardner, 1935, p. 198 localities

*Types*.—Syntypes, No. 82 missing prior to 1954 PRI; No. 2349 PRI

**Dentalium microstria** Heilprin**Dentaliidae**

*Dentalium microstria* Heilprin, 1881, p. 375, pl. 20, fig. 3; Aldrich, 1895b, p. 3, pl. 1, fig. 6; Harris, 1899a, p. 3, pl. 1, figs. 1, 1a; Palmer, 1937, p. 19, pl. 2, figs. 42, 43

*Dentalium microstria* Heilprin, Aldrich, 1886, p. 52; de Gregorio, 1890, p. 173; Pilsbry and Sharp, 1898, p. 209; Brann and Kent, 1960, p. 319

Not *Dentalium* cf. *microstria* Heilprin, Sutton, 1946, p. 1681

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Localities*.—ALA.: Clarke Co., Cave Branch tributary of Bashi Creek (type); Woods Bluff, Tombigbee R.; Choctaw Corner; Monroe Co., 4 mi. N. of Hamilton; Wilcox Co., Bethel; Washington Co., Hatchetigbee Bluff, Tombigbee R.; Choctaw Co., 4 mi. S. of Mount Sterling, Butler;  $\frac{1}{2}$  mi. S. of Butler

*Type*.—Holotype, No. 20 GSATC



**Dentalium (Antalis) minutistriatum Gabb****Dentaliidae**

*Dentalium minutistriatum* Gabb, 1860d, p. 386, pl. 67, fig. 46; Conrad, 1865a, p. 34; Conrad, 1866a, p. 10; Heilprin, 1891a, p. 401; Dall, 1892, p. 438 in part; Pilsbry and Sharp, 1898, p. 209; Clark and Martin, 1901, p. 158 in part, not pl. 29, fig. 7 (= *Dentalium* sp.); Deussen, 1924, p. 67, pl. 22, fig. 5; Trowbridge, 1932, pl. 42, fig. 10 copy Deussen

Cf. *Dentalium minutistriatum* Gabb ?, Cossmann, 1893, p. 19, pl. 1, fig. 22 [*minustistriatum* sic]

*Dentalium (Antalis) minutistriatum* Gabb, Palmer, 1937, p. 17, pl. 2, figs. 33-36, 38, 41; Harris and Palmer, 1947, p. 210, pl. 26, fig. 28; Brann and Kent, 1960, pp. 319, 320

*Dentalium (Graptacme) minutistriatum* Gabb, Shimer and Shrock, 1944, p. 523, in part, pl. 214, fig. 13 copy Deussen, not fig. 12 (= *Dentalium* sp.)

*Range*.—Middle Eocene. Wheelock mem. (type), Cook Mt. fm., upper Claiborne gr.; McBean fm., upper Claiborne gr.; Gosport sd., uppermost Claiborne gr. Upper Eocene, lower Jackson gr. ?  
*Localities*.—TEXAS: *Robertson Co.*, Town Branch of Cedar Creek near Wheelock (type). ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. S.C.: *Orangeburg Co.*, 3 mi. WNW. Orangeburg. ? LA.: *Grant Par.*, Montgomery, Red R. for complete list of localities in Texas, La., Miss., and Ala. see Palmer, 1937, p. 17  
*Type*.—Holotype, No. 13264 ANSP [broken]

*Dentalium minutistriatum* Gabb, Clark and Martin, 1901. Not Gabb, 1860d  
 See *Dentalium* sp.

*Dentalium minutistriatum* Gabb, Dall, 1892 in part. Not Gabb, 1860d  
 See *Dentalium mediaviense* Harris

*Dentalium minutistriatum dumblei* new var. Harris in Kennedy, 1895, pp. 97, 114, 123, 126, 128, 130=*nomen nudum*. Harris proposed name in his Texas Eocene MS., but name was not published. *Fide* Palmer, 1937, p. 21

*Dentalium mississippiensis* Conrad, Clark and Martin, 1901. Not Conrad, 1848a  
 See *Dentalium* sp.

**Dentalium (Antalis) mississippiense jacksonense Palmer****Dentaliidae**

*Dentalium (Antalis) mississippiense jacksonense* Palmer in Harris and Palmer, 1947, p. 212, pl. 26, figs. 20-22; Brann and Kent, 1960, p. 320

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.; Yazoo cl., upper Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type); Moodys Branch; Town Cr.; *Caldwell Par.*, Bunker Hill, Ouachita R.; Gibson Ldg., Ouachita R. TEXAS: *Sabine Co.*, 1 mi. below Robinson's Ferry, Sabine R. ALA.: *Clarke Co.*, Garland Cr., near Shubuta. LA.: *Grant Par.*, Montgomery, Red R.

*Types*.—Holotype, No. 4477; paratypes, Nos. 4478, 4479 PRI

**Dentalium multannulatum Aldrich****Dentaliidae**

*Dentalium multannulatum* Aldrich, 1895b, p. 3, pl. 1, fig. 3; Pilsbry and Sharp, 1898, p. 210; Harris, 1899a, p. 4, pl. 1, fig. 2 holotype

*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

*Locality*.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type)

*Type*.—Holotype, No. 638920 USNM

*Dentalium multistriatum* Heilprin in Aldrich, 1886, p. 46; de Gregorio, 1890, p. 173; Palmer, 1937, p. 20 is a *nomen nudum*

*Dentalium subcompressum* Meyer

See *Fustiaria* (*Laevidentalium*) *subcompressa* (Meyer)

### **Dentalium sylvaerupis** (Harris)

### **Dentaliidae**

*Serpulorbis sylvaerupis* Harris, 1899a, p. 73, pl. 10, fig. 1; Brann and Kent, 1960, p. 793

*Range*.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

*Type*.—Holotype, No. 268 PRI

### **Dentalium (Antalis) thalloides** Conrad

### **Dentaliidae**

*Dentalium thalloides* Conrad, 1833b, p. 34, not pl. 18, fig. 1 as in text (Harris reprint, 1893, p. 56); Conrad, App. in Morton, 1834, p. 8; Conrad, 1835a, p. 39, pl. 15, fig. 10 (Harris reprint, 1893, p. 95, pl. 15, fig. 10); Conrad, 1846b, p. 211, pl. 1 [2], fig. 2; Bronn, 1848a, p. 416; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 373; Tuomey, 1858, pp. 265, 274; Conrad, 1865a, p. 34; Conrad, 1866a, p. 10; Aldrich, 1886, pp. 44, 46; de Gregorio, 1890, p. 171, pl. 17, figs. 15-17, fig. 18 copy Conrad, fig. 21a copy Conrad, fig. 21b, copy *D. alternatum* I. Lea; Dall, 1892, p. 438 in part; Cossmann, 1893, p. 19; Harris, 1895b, p. 45; Pilsbry and Sharp, 1898, p. 218; Harris, 1899a, p. 4

*Dentalium alternatum* I. Lea, 1833, p. 34, pl. 1, fig. 2; Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 4 (= *D. thalloides* Conrad)

*Dentalium asgum* de Gregorio, 1890, p. 171, pl. 17, figs. 22-24; var. *tirpum* de Gregorio, 1890, p. 172, pl. 17, figs. 25a, b

*Dentalium bimixtum* de Gregorio, 1890, p. 172, pl. 17, figs. 32-34

*Dentalium (Antalis) thalloides* Conrad, Palmer, 1937, p. 12, pl. 1, figs. 16, 18-26; Brann and Kent, 1960, pp. 321, 322

*Dentalium thalloide* Conrad, Shimer and Shrock, 1944, p. 523 in part, pl. 214, fig. 17 copy Conrad

*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Types*.—Lectotype *Dentalium thalloides* Conrad, Palmer, 1937, p. 14; type missing ANSP, Moore, 1962, p. 102. Holotype *D. alternatum* I. Lea, No. 5005 ANSP ? Holotype *D. asgum* and var. *tirpum* de Gregorio, formerly de Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost

### **Dentalium (Antalis) thalloides claibornense** Palmer

### **Dentaliidae**

*Dentalium (Antalis) thalloides claibornense* Palmer, 1937, p. 14, pl. 1, figs. 1, 2, 5; Brann and Kent, 1960, p. 322

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.  
*Localities*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). MISS.: Clarke Co., Wautubbee  
*Types*.—Syntypes, Nos. 2626, 2627 PRI

*Dentalium turritum* I. Lea  
 See *Cadulus turritus* (I. Lea)

*Dentalium turritum* I. Lea, de Gregorio, 1890  
 See *Cadulus turritus* (I. Lea)  
 See also *Dentalium (Antalis) arciforme* Conrad  
 See also *Fustiaria (Laevidentalium) danai* Meyer

#### **Dentalium (Antalis) vincense Palmer**

#### **Dentaliidae**

*Dentalium (Antalis) vincense* Palmer in Harris and Palmer, 1947, p. 209, pl. 26, figs. 29-31; Wilbert, 1953, p. 98; Brann and Kent, 1960, p. 322

*Range*.—Upper Eocene. Lower Jackson gr. (type)  
*Localities*.—ARK.: Cleveland Co., Vince Ferry, Saline R. (type); Jefferson Co., White Bluff, W. bank Arkansas R.  
*Types*.—Holotype, No. 4468 PRI; paratypes, Nos. 4469-4470 PRI

#### **Dentalium sp.**

#### **Dentaliidae**

*Dentalium minutistriatum* Gabb, Clark and Martin, 1901, p. 158 in part, pl. 29, fig. 7; Shimer and Shrock, 1944, p. 523 in part, pl. 214, fig. 12 copy Clark and Martin, in subgenus *Graptacme*. Not Gabb, 1860d, p. 386

*Range*.—Lower Eocene. Nanjemoy fm.  
*Locality*.—MD.: Charles Co., Popes Cr.  
*Type*.—Figured specimen, USNM

*Dentalium* sp., Palmer, 1937 in part  
 See *Dentalium incisissimum* Meyer and Aldrich

#### **Dentalium sp.**

#### **Dentaliidae**

*Dentalium mississippiensis* Conrad, Clark and Martin, 1901, p. 159, pl. 29, fig. 8. Not Conrad, 1848a, p. 282

*Range*.—Paleocene. Aquia fm., Lower Eocene. Nanjemoy fm.,  
*Localities*.—MD.: Prince Georges Co., Upper Marlboro (1 mi. NE. Piscataway; Charles Co., W. of Port Tobacco  
*Type*.—Figured specimen, USNM (Upper Marlboro, Aquia fm.)

#### **Dentalium sp.**

#### **Dentaliidae**

*Dentalium* sp. Palmer, 1937, p. 18, pl. 1, fig. 8; Brann and Kent, 1960, p. 321

*Range*.—Middle Eocene. Stone City beds, middle Claiborne gr.  
*Locality*.—TEXAS: Sabine Co., Sabine R., Texas side opposite SW. corner SE.  $\frac{1}{4}$  sec. 35, T. 5 N., R. 13 W., Sabine Par., La. Outcrop 21, (Veatch, 1902, p. 129)  
*Type*.—Figured specimen, No. 2639 PRI

**Dentalium sp.****Dentaliidae**

*Dentalium* sp., Palmer, 1937, p. 18, pl. 1, fig. 11; Brann and Kent, 1960, p. 321

*Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

*Locality*.—LA.: *Ouachita Par.*, Lapiniere Ldg., E. bank Ouachita R.

*Type*.—Figured specimen, No. 2640 PRI

**Dentalium sp.****Dentaliidae**

*Dentalium* sp. Harris and Palmer, 1947, p. 213, pl. 26, fig. 19; Brann and Kent, 1960, p. 321

*Range*.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

*Locality*.—ALA.: *Washington Co.*, St. Stephens Bluff, Tombigbee R. ARK.: *Cleveland Co.*, Vince Ferry, Saline R. Not ½ mi. W of

Graveyard Hill, Ala., as in Brann and Kent, 1960, p. 321

*Type*.—Figured specimen, No. 4480 PRI

"*Dischides*" *abruptus* (Meyer and Aldrich)

See *Cadulus* (*Dischides*) *abruptus* (Meyer and Aldrich)

*Dischides subcoarctuata* (Gabb)

See *Cadulus* (*Dischides*) *subcoarctuatus* (Gabb)

*Ditrupa subcoarctuata* Gabb

See *Cadulus* (*Dischides*) *subcoarctuatus* (Gabb)

**Fustiaria (Laevidentalium) danai** (Meyer)**Dentaliidae**

*Dentalium Danai* Meyer, 1885a, p. 462; Meyer, 1886b, p. 64, pl. 3, figs. 2, 2a; de Gregorio, 1890, p. 172 under *D. turritum* I. Lea; Dall, 1892, pp. 438, 439 in part; Cossmann, 1893, p. 19 *Laevidentalium*; Pilsbry and Sharp, 1898, p. 202

Not *Dentalium danai* Martin, 1904, p. 272 Miocene

*Dentalium* (*Laevidentalium*) cf. *danai* Meyer, Harris and Palmer, 1947, p. 213, pl. 26, figs. 12, 13 copies Meyer; fig. 18 *D. cf. danai*; Brann and Kent, 1960, p. 317

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

*Localities*.—MISS.: *Hinds Co.*, Jackson (type). LA.: *Grant Par.*, Montgomery Ldg., Red R.

*Type*.—Holotype, No. 638703 USNM

**Fustiaria (Laevidentalium) subcompressa** (Meyer)**Dentaliidae**

*Dentalium subcompressum* Meyer, 1885a, p. 462; Meyer, 1886b, p. 64, pl. 3, figs. 3, 3a; Meyer, 1887b, p. 54, pl. 3, figs. 13, 13a; Dall, 1892, p. 439; Cossmann, 1893, p. 19; Pilsbry and Sharp, 1898, p. 216

*Dentalium* (*Laevidentalium*) *subcompressum* Meyer, Harris and Palmer, 1947, p. 214, pl. 26, fig. 6 copy Meyer, cf. fig. 15; Brann and Kent, 1960, p. 321

*Range*.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr. Oligocene

*Localities*.—MISS.: *Hinds Co.*, Jackson (type); *Warren Co.*, Vicksburg (Oligocene); *Wayne Co.*, Red Bluff [Hiwanee Station], Chickasawhay R. (Oligocene)

*Type*.—Holotype, No. 638701 USNM

- Gadus juvenis* (Meyer)  
See *Cadulus juvenis* Meyer
- Gadus subcoarctatus* [sic] (Gabb)  
See *Cadulus* (*Dischides*) *subcoarctatus* (Gabb)
- Graptacme mediaviense* (Harris)  
See *Dentalium mediaviense* Harris
- Graptacme minutistriatum* (Gabb)  
See *Dentalium* (*Antalis*) *minutistriatum* Gabb
- Laevidentalium danai* (Meyer)  
See *Fustiaria* (*Laevidentalium*) *danai* (Meyer)
- Laevidentalium subcompressum* (Meyer)  
See *Fustiaria* (*Laevidentalium*) *subcompressa* (Meyer)
- Polyschides jacksonensis* (Meyer)  
See *Cadulus* (*Polyschides*) *jacksonensis* Meyer
- Polyschides margarita* Palmer  
See *Cadulus* (*Polyschides*) *margarita* Palmer
- Polyschides newtonensis* (Meyer and Aldrich)  
See *Cadulus* (*Polyschides*) *newtonensis* Meyer and Aldrich
- Polyschides quadriturritus* (Meyer), Palmer, 1937 Jackson Eocene  
See *Cadulus* (*Polyschides*) *margarita* Palmer
- Polyschides turritus* (I. Lea)  
See *Cadulus* (*Polyschides*) *turritus* (I. Lea)
- Serpulorbis sylvaerupis* Harris  
See *Dentalium sylvaerupis* (Harris)
- Siphonodentalium* ? *jacksonense* (Meyer)  
See *Cadulus jacksonensis* Meyer
- Siphonodentalium* (*Cadulus* ?) *turgidus* (Meyer)  
See *Cadulus turgidus* Meyer

## CEPHALOPODA

- Advena americana* (Meyer and Aldrich)  
See *Belemnosella americana* (Meyer and Aldrich)
- Advena floweri* Palmer  
See *Belemnosella floweri* (Palmer)
- Anevda floweri* (Palmer)  
See *Belemnosella floweri* (Palmer)

## Angulithes elliotti (Stenzel)

## Hercoglossidae

- Deltoidonautilus elliotti* Stenzel, 1940a, pp. 733, 759, pl. 38, figs. 1-6; pl. 39, figs. 1, 2; text figs. 123 (2), 124 (2); Stenzel, [1942], Cephalopoda cards Nos. 18a, 18b, 9 figs; Miller, 1947, p. 65, pl. 47, figs. 1, 2; pl. 48, figs. 1, 2 holotype, 3
- Angulithes elliotti* (Stenzel), Kummel, 1956, pp. 335, 456, fig. 33K



*Range*.—Middle Eocene. Marquez shale mem. (type), Reklaw fm., lower Claiborne gr.

*Locality*.—TEXAS: *Bastrop Co.*, bluff along Ridge Cr. about 1 mi. above Missouri, Kansas, and Texas R.R. trestle and the county road bridge, 6.2 mi. W. of Smithville or 0.8 mi. E. of Upton in east part of R. Andrews survey (Bur. Ec. Geol. sta. 11-T-7) (type)

*Types*.—Holotype, No. 20901; paratypes, Nos. 20902 (pl. 38, figs. 5, 6), 20896 (pl. 39) BEG

#### **Aturia alabamensis (Morton)**

#### **Aturiidae**

*Nautilus alabamensis* Morton, 1834, p. 33, pl. 18, fig. 3; Morton, 1842a, p. 217; Conrad, 1858c, p. 335; Aldrich, 1886, p. 43; de Gregorio, 1890, p. 15 as sp. dub., pl. 1, fig. "39" outline of Morton; Cossmann, 1893, p. 51

*Megasiphonia alabamensis* (Morton), d'Orbigny, 1850, p. 338

*Aturia ziczac* (Sowerby), Geinitz, 1887, pp. 53-56 in part, pl. III; de Gregorio, 1890, p. 14, pl. 1, figs. 35-38b [39b]. Not *Nautilus ziczac* James Sowerby, 1812, p. 12, pl. 1, fig. 3

*Aturia alabamensis* (Morton), Conrad, 1865a, p. 15; Conrad, 1866a, p. 26; Hopkins, 1917, p. 296 as *Belosepia ungula*, pl. 27, fig. 1; Cooke, 1926a, pl. 96, fig. 6; Kellum, 1926, p. 32; Semmes, 1929, fig. 62-6; Schenck, 1931, pp. 444, 445, pl. 77, fig. 1; pl. 78, fig. 1; Aldrich, 1931, p. 7, pl. 4, fig. 1; Scott, 1932, p. 328, pl. 23, fig. 15; Trowbridge, 1932, pl. 43, figs. 4, 5 copies Gardner, 1923; Stenzel, 1935, p. 556, pl. 63, figs. 2a-2b; text fig. 5; Miller and Furnish, 1938, pp. 150, 151, fig. F; pp. 153, 154, pl. 25, figs. 1, 2, 5, 6; Stenzel, 1940a, pp. 732-773; Stenzel, [1942], *Cephalopoda* cards Nos. 21a, 21b, figs. 1-3; Shimer and Shrock, 1944, p. 549, pl. 225, figs. 10, 11 copies Miller and Furnish; Miller, 1947, p. 81, pl. 56, figs. 7-9; pl. 57, figs. 1, 2 holotype; pl. 58, figs. 1, 2; pl. 59; pl. 60, figs. 1, 2; pl. 61; pl. 62, fig. 2; pl. 63, figs. 1, 2; pl. 64, figs. 1, 2; pl. 65, figs. 1-5; pl. 66, figs. 1, 2; pl. 67, figs. 1, 2; pl. 68, figs. 1, 2, 5, 6 see for more complete references; Harris and Palmer, 1947, p. 465, pl. 65, fig. 8; Richards and Palmer, 1953, p. 55 not Avon Park; Kummel, 1956, pp. 331, 466

*Range*.—Upper Eocene. Jackson gr.

*Localities*.—ALA.: *Monroe Co.*, near Claiborne (type). Presumably near Suggsville, *Clarke Co.* *vide* Stenzel, [1942]. For enumeration of localities see Miller, 1947, pp. 82-84

*Type*.—Holotype, No. 16120 ANSP. For reference to hypotypes see Miller, 1947, p. 83

#### **Aturia brazoensis Stenzel**

#### **Aturiidae**

*Aturia (Brazaturia) brazoensis* Stenzel, 1935, pp. 552, 555, 559, pl. 64, figs. 1a-1f, text fig. 3; Stenzel, 1940a, pp. 732, 766-769, 774, text figs. 125 (5), 126 (4)

*Aturia brazoensis* Stenzel, Stenzel [1942], *Cephalopoda* card Nos. 23a, 23b, figs. 1a, 1b holotype 1c, 1d, text figs. 4, 5; Miller, 1947, pp. 88-90, pl. 69, figs. 1-4, holotype; pl. 70, figs. 1, 2; pl. 71, figs. 1, 2; pl. 72, figs. 6, 7; pl. 73, fig. 7; Miller and Downs, 1950, pp. 10, 11, pl. 9, figs. 5, 6; Kummel, 1956, pp. 333, 467

*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gr.; Weches fm., middle Claiborne gr.

*Localities*.—TEXAS.: *Burleson Co.*, Stone City, bluff on right bank of Brazos R. at bridge at State Highway 21 and bridge of

Southern Pacific R.R. (type); *Leon Co.*, about 0.1 mi. S. of wooden bridge over MacDonald Creek in road running along boundary between B. Middleton and John Beauchamp surveys, in SW. corner of J. H. Cook 150 acres, SW. corner of John Beauchamp survey, 6.3 mi. WSW. of Centerville (paratype)

*Types*.—Holotype, No. 20908; paratypes, Nos. 20906, 20912 BEG

**Cf. *Aturia brazoensis* Stenzel**

**Aturiidae**

*Aturia (Brazaturia) cf. At. brazoensis* Stenzel, 1940a, p. 776

*Range*.—Middle Eocene. Crockett fm. [Cook Mt. fm.], upper Claiborne gr.

*Locality*.—TEXAS: *Webb Co.*, bluff left bank Chacon Cr. about ¼ mi. upstream from intersection Chacon Cr. with U.S. highway No. 96 (Laredo-Corpus Christi rd.), at E. city limits, Laredo

*Types*.—Unfigured specimens (7), No. 20907 BEG

***Aturia garretti* Stenzel**

**Aturiidae**

*Aturia (Brazaturia) garretti* Stenzel, 1940a, pp. 732, 766-769, 772, pl. 42, figs. 1-3, text figs. 125 (6), 126 (3)

*Aturia garretti* Stenzel, Stenzel [1942], Cephalopoda card No. 24; figs. 1-3, text fig. 5, 125 (6), 126 (3) holotype; Miller, 1947, p. 97, pl. 75, figs. 1, 2 holotype; Kummel, 1956, pp. 335, 467

*Range*.—Middle Eocene. Saline Bayou mem. (type), upper Cook Mt. fm., upper Claiborne gr.

*Locality*.—LA.: *Winn Par.*, left bank of Saline Bayou at R.R. trestle of Louisiana R.R. and Navigation Co., at St. Maurice, sec. 15, T. 9 N., R. 6 W. (type)

*Type*.—Holotype, No. 2001 LSU Pal. Mus.

***Aturia laticlavina* Stenzel**

**Aturiidae**

*Aturia (Brazaturia) laticlavina* Stenzel, 1935, pp. 552, 555, 558, pl. 63, figs. 4a, 4b; Stenzel, 1940a, pp. 732, 766-769, 773

*Aturia laticlavina* Stenzel, Stenzel [1942], Cephalopoda card No. 25; figs. 1, 4a, 4b, 125 (3), 126 (6b) holotype; Miller, 1947, p. 99, pl. 73, figs. 1, 2 holotype; Kummel, 1956, pp. 337, 467

*Range*.—Middle Eocene. Limestone bed in Tyus mem. (type), Weches fm., middle Claiborne gr.; lower Cane River glauconitic ml. [fm.], middle Claiborne gr.

*Localities*.—TEXAS: *Leon Co.*, Bald Mound, 0.5 mi. NW. of Hope-well Negro Church and school, on old Centerville-Jewett road, 4.83 mi. NW. of Centerville, H.R. Benson 50-acre tract, R. Woods survey (Bur. Ec. Geol. sta. 145-T-43) (type). LA.: *Natchitoches Par.*, in *Ostrea lisbonensis* Harris bed in road cut along State highway No. 12, 1.47 mi. S. of depot at Chestnut near center of sec. 7, T. 12 N, R. 6 W., Louisiana Meridian

*Type*.—Holotype, No. 20900 BEG

*Aturia paucifex* [sic] Cope

See *Aturoidea paucifex* (Cope)

*Aturia paucifex* Cope

See *Aturoidea paucifex* (Cope)

**Aturia triangula Stenzel****Aturiidae**

*Aturia (Brazaturia) triangula* Stenzel, 1935, pp. 552, 555, 557, pl. 63, figs. 3a, b; text fig. 2; Stenzel, 1940a, pp. 732, 766-769

*Aturia triangula* Stenzel, Stenzel [1942] Cephalopoda card No. 26, figs. 3a, 3b, text figs. 2, 125 (4), 126 (5) holotype; Miller, 1947, p. 106, pl. 96, figs. 1-5 holotype; Kummel, 1956, pp. 343, 468

*Range*.—Middle Eocene. Limestone bed in Tyus mem. (type), Weches fm., middle Claiborne gr.

*Locality*.—TEXAS: *Leon Co.*, Bald Mound, 0.5 mi. NW. of Hope-well Negro church and school on old Centerville-Jewett road 4.83 mi. NW. of Centerville, H.R. Benson 50-acre tract, R. Woods survey (Bur. Ec. Geol. sta. 145-T-43) (type)

*Type*.—Holotype, No. 20914 BEG

**Aturia turneri Stenzel****Aturiidae**

*Aturia (Brazaturia) turneri* Stenzel, 1940a, pp. 732, 766, 770, pl. 41, figs. 1-6, text figs. 125 (2), 126 (7)

*Aturia turneri* Stenzel, [1942], Cephalopoda cards Nos. 27a, 27b, figs. 1-5, text figs. 125 (2), 126 (7) holotype; Miller, 1947, p. 108, pl. 72, figs. 1-5 holotype; Kummel, 1956, pp. 343, 468

*Range*.—Middle Eocene. Marquez shale mem. (type), Reklaw fm., lower Claiborne gr. Found in concretionary discontinuous fossiliferous, lenticular, impure limestone, about 44 ft. below top of Marquez shale.

*Locality*.—TEXAS: *Bastrop Co.*, bluffs along Ridge Creek about 1 mi. above Missouri, Kansas, and Texas R.R. trestle and county line bridge, 6.2 mi. W. of Smithville or 0.8 mi. E. of Upton, in east part of R. Andrews survey. (Bur. Ec. Geol. Sta. 11-T-7) (type)

*Type*.—Holotype, No. 20905 BEG

**Aturia vanuxemi (Conrad)****Aturiidae**

*Nautilopsis Vanuxemi* Conrad, 1848a, p. 299

*Pelagus Vanuxemi* (Conrad), Conrad, 1848b, p. 130, pl. 14, figs. 15, 17

*Nautilus zig-zag* [sic] Sowerby, Conrad, 1848b, p. 129. Not *N. ziczac* James Sowerby, 1812, p. 12

*Aturia Vanuxemi* (Conrad), Edwards, 1849, p. 52; Conrad, 1865a, p. 15; Conrad, 1866a, p. 19; Conrad in Cook, 1868, p. 377, text fig.; Conrad, 1868, p. 732; Whitfield, 1892, p. 287, pl. 49, figs. 1-3; pl. 50, fig. 1; Scott, 1898, p. 505, pl. 11, fig. 8; Scott, 1907, p. 737, pl. 16, fig. 8; Stenzel, 1935, pp. 555, 556 in subgenus *Brazaturia*; Stenzel, 1940a, p. 732; Stenzel, [1942], Cephalopoda card No. 28, figs. 15, 17; Shimer and Shroek, 1944, p. 549, pl. 225, figs. 12, 13 copies Whitfield; Miller, 1947, p. 109, pl. 62, fig. 1; pl. 79, fig. 4; pl. 97, figs. 1, 2 copies Whitfield; Kummel, 1956, pp. 343, 468. See Miller for further references.

*Nautilus vanuxemi* (Conrad), Conrad, 1858c, p. 335

*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

*Locality*.—N.J.: *Monmouth Co.*, Long Branch (type)

*Type*.—Missing, ANSP Moore, 1962, p. 106

*Aturia ziczac* of authors not James Sowerby, 1812

See *Aturia alabamensis* (Morton)

**Aturia** sp.**Aturiidae**

*Aturia* (*Brazaturia*) sp. Barry, 1942+, pp. 24, 76, pl. 11, figs. 3-5;  
Miller, 1947, p. 113, pl. 82, figs. 4, 5

*Range*.—Lower Eocene. Pendleton Ferry fm., middle Wilcox  
[Sabine] gr.

*Locality*.—TEXAS: Sabine Co., Pendleton, west bank of Sabine R.  
about ¼ mi. upstream from bridge on Louisiana Highway 6

*Type*.—Figured specimen, No. 5040 LSU Pal. Mus.

**Aturoidea paucifex** (Cope)**Hercoglossidae**

*Aturia paucifex* [sic] Cope, 1866, pp. 3, 4

*Aturia paucifex* Cope, 1867, p. 40

*Hercoglossa paucifex* (Cope), Conrad in Cook, 1868, p. 731; Whitfield,  
1892, p. 246, pl. 39, fig. 1; Whitfield, 1899, p. 179; Johnson, 1905, p.  
28; Weller, 1907, p. 815, pl. 102, fig. 1 type

*Aturoidea paucifex* (Cope), Miller and Thompson, 1935, p. 566, pl. 65,  
figs. 1, 2; Miller and Furnish, 1938, p. 150, fig. 1E; Stenzel, 1940a,  
p. 732; Stenzel, [1942], Cephalopoda card Nos. 19a, 19b, figs. 1, 2,  
text fig. 1; Shimer and Shrock, 1944, p. 549, pl. 225, fig. 14 type copy  
Weller; Miller, 1947, p. 73, pl. 55, fig. 3 holotype, text fig. 18 see  
for complete synonymy; Kummel, 1956, pp. 339, 464, fig. 31J.

*Range*.—Paleocene. Hornerstown fm. (type)

*Locality*.—N.J.: Gloucester Co., marl pit of Thomas Heritage,  
north of Glassboro (type)

*Type*.—Holotype, No. 13133 ANSP

**Aturoidea pilsbryi** Miller and Thompson**Hercoglossidae**

*Aturoidea pilsbryi* Miller and Thompson, 1935, p. 568, pl. 66, figs. 1-3;  
Stenzel, 1940a, p. 732, Stenzel, [1942], Cephalopoda card No. 20,  
figs. 1-3, text fig. 2; Miller, 1947, p. 76, pl. 55, figs. 1, 2 holotype;  
text fig. 19; Kummel, 1956, pp. 339, 464

*Range*.—Lower Eocene. Probably Vincentown fm. (type); Manas-  
quan fm.

*Locality*.—N.J.: Burlington Co., "At or near Medford". "Coll. Dr.  
Thos. Wistar."

*Type*.—Holotype, No. 13137 ANSP

**Belemnosella americana** (Meyer and Aldrich)**Belemnosidae**

*Belemnosis Americana* Meyer and Aldrich, 1886, p. 47, pl. 2, figs. 26,  
26a

*Belemnosella americana* (Meyer and Aldrich), Naef, 1922, p. 49, fig. 12;  
Stenzel, 1941, p. 90

*Advena americana* (Meyer and Aldrich), Palmer, 1937, p. 511, pl. 76,  
figs. 13, 14 copies Meyer and Aldrich

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—MISS.: Clarke Co., Wautubbee (type)

*Type*.—Holotype, No. 638750 USNM

**Belemnosella floweri** (Palmer)**Belemnosidae**

*Advena floweri* Palmer, 1937, p. 512, pl. 76, figs. 10-12, 15; Brann and  
Kent, 1960, p. 29

*Anevda floweri* (Palmer), Palmer, 1940, p. 285

*Belemnosella floweri* (Palmer), Stenzel, 1941, p. 90



*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 3402 PRI

*Belemnosis americana* Meyer and Aldrich

See *Belemnosella americana* (Meyer and Aldrich)

**Belosaepia alabamensis** Palmer

**Sepiidae**

*Belosaepia alabamensis* Palmer, 1937, p. 508, pl. 77, figs. 1, 15; Brann and Kent, 1960, p. 120

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 3403 PRI

**Belosaepia alabamensis voltzi** Palmer

**Sepiidae**

*Belosaepia alabamensis voltzi* Palmer, 1937, p. 509, pl. 77, figs. 10, 12; Brann and Kent, 1960, p. 120

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 3408 PRI

**Belosaepia harrisi** Palmer

**Sepiidae**

*Belosaepia harrisi* Palmer, 1937, p. 510, pl. 77, figs. 11, 17, 19; Brann and Kent, 1960, p. 120

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

*Type*.—Holotype, No. 3409 PRI

**Belosaepia saccaria** Palmer

**Sepiidae**

*Belosaepia saccaria* Palmer, 1937, p. 509, pl. 77, figs. 4, 13, 16; Brann and Kent, 1960, p. 120

*Range*.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

*Locality*.—ALA.: Monroe Co., Lisbon Ldg., W. bank Alabama R. about 6½ mi. above bridge at Claiborne (type)

*Type*.—Holotype, No. 3404 PRI

**Belosaepia uncinata** Palmer

**Sepiidae**

*Belosaepia uncinata* Palmer, 1937, p. 507, pl. 77, figs. 8, 9, 18, 20, 21; Brann and Kent, 1960, pp. 120, 121

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Localities*.—LA.: Sabine Par., Columbus, Sabine R. (type); Ouachita Par., Lapiniere Ldg., E. bank Ouachita R. ALA.:

Monroe Co., Lisbon Ldg., on W. bank Alabama R. about 6½ mi. above Claiborne bridge; base of Claiborne Bluff, Alabama R.

*Types*.—Holotype, No. 3407; paratypes, Nos. 3406, 3410 PRI



**Belosaepia unguia Gabb****Sepiidae**

*Sepia (Belosepia) unguia* Gabb, 1860c, p. 324; Gabb, 1860d, p. 376, pl. 67, figs. 1-4

*Belosepia unguia* Gabb, Conrad, 1865a, p. 16; Conrad, 1866a, p. 19; Aldrich, 1886, p. 48; Meyer and Aldrich, 1886, p. 50 in part, not p. 17 as in De Gregorio; de Gregorio, 1890, p. 15; Cossmann, 1893, p. 51, pl. 2, figs. 8-10; Veatch, 1906, pl. 19, figs. 7, 7a, 7b copy Gabb; Shimer and Shrock, 1944, p. 597, pl. 250, figs. 19-21 copies Cossmann  
*Belosaepia unguia* Gabb, Palmer, 1937, p. 505, pl. 77, figs. 2, 3, 5, 6, 7, 14; Brann and Kent, 1960, p. 121

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.; Gosport sd., uppermost Claiborne gr.

*Localities*.—TEXAS: *Robertson Co.*, Wheelock (type, Gabb)= Town Branch of Cedar Creek near Wheelock *vide* Stenzel, Krause, and Twining, 1957, p. 11. ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (Gabb, Palmer)

*Type*.—Holotype, No. 12759 ANSP

**Belosaepia veatchi Palmer****Sepiidae**

*Belosaepia veatchi* Palmer, 1937, p. 508, pl. 76, figs. 3-5; Brann and Kent, 1960, p. 121

*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

*Locality*.—LA.: *Sabine Par.*, Columbus, Sabine R. (type)

*Type*.—Holotype, No. 3401 PRI

***Belosepia***

See *Belosaepia*

***Brazaturia garretti* Stenzel**

See *Aturia garretti* Stenzel

***Brazaturia laticlavata* Stenzel**

See *Aturia laticlavata* Stenzel

***Brazaturia turneri* Stenzel**

See *Aturia turneri* Stenzel

***Brazaturia* sp.**

See *Aturia* sp.

***Brazaturia triangula* Stenzel**

See *Aturia triangula* Stenzel

***Cimomia haltomi* (Aldrich)****Hercoglossidae**

*Nautilus* sp. Aldrich, 1886, p. 60; de Gregorio, 1890, p. 14 *vide* Miller, 1947, p. 41

*Eutrephoceras haltomi* Aldrich, 1931, p. 6, pl. 1, fig. 1; pl. 2, fig. 1; pl. 3, figs. 1, 2

*Cimomia haltomi* (Aldrich), Miller and Thompson, 1933, p. 307, text figs. 2A, 3; Stenzel, 1940a, pp. 732, 752, fig. 119 (1); Stenzel, [1942], Cephalopoda card No. 7, figs. 1, 2, text figs. 2A, 3; Miller, 1947, p. 41, pl. 27, fig. 2 holotype; pl. 28, figs. 1, 2; Kummel, 1956, pp. 336, 450, fig. 31L

*Range*.—Paleocene. Sucarnoochee clay (type), upper Midway gr.

*Locality*.—ALA.: *Sumter Co.*, Black Bluff Ldg. (extant) east of Whitfield, right side of Tombigbee R. (type)

*Types*.—Holotype and paratypes, No. 18 GSATC; topotype figured by Miller and Thompson No. 615, Geol. Dept., State Univ. Iowa, Iowa City, Iowa

**Cimomia marylandensis** Miller and Thompson**Hercoglossidae**

? *Nautilus* sp. Tuomey, 1842a, p. 156; Tuomey, 1842b, p. 187

? *Nautilus* sp. Clark, 1895, p. 4; Clark, 1896, p. 63, pl. 9, fig. 1

*Hercoglossa tuomeyi* Clark and Martin, 1901, p. 122 in part, pl. 17; pl. 19, fig. 1; not pl. 18, fig. 1; Stenzel, 1940a, pp. 746, 747, text fig. 117 (7) in part

*Cimomia marylandensis* Miller and Thompson, 1933, p. 305 footnote; Stenzel, [1942], Cephalopoda card No. 8, fig. (pl. 17), fig. 1 holotype; Miller, 1947, p. 44, pl. 42, figs. 1, 2 copy holotype; Kummel, 1956, pp. 338, 451

*Range*.—Lower Eocene. Upper Woodstock greensand mem. (type), Nanjemoy fm.

*Locality*.—MD.: Charles Co., bluff one mile below Popes Creek on left bank of Potomac R. (type)

*Type*.—Holotype, USNM

**Cimomia subrecta** Miller and Thompson**Hercoglossidae**

*Cimomia subrecta* Miller and Thompson, 1933, p. 308, pl. 35, figs. 1, 2, text fig. 2B; Stenzel, 1940a, pp. 750-752, text figs. 118 (4), 119 (2); Stenzel, [1942], Cephalopoda card Nos. 9a, 9b, figs. 1, 2, 2B; Shimer and Shrock, 1944, p. 550, pl. 225, fig. 6 copy Miller and Thompson; Miller, 1947, p. 46, pl. 31, figs. 1, 2 holotype; Kummel, 1956, pp. 342, 452

*Range*.—Paleocene. Clayton fm. (type), lower Midway gr.

*Localities*.—MISS.: Oktibbeha Co., about 4½ mi. S. of Starkville, E. ½ sec. 28, T. 18 N., R. 14 E. (type); 3 mi. W. of Starkville (paratype)

*Type*.—Holotype, No. 618; paratype, No. 619. Geol. Dept., State Univ. Iowa, Iowa City, Iowa

**Cimomia vauhani** (Gardner)**Hercoglossidae**

*Enclimaceras vauhani* Gardner, 1923, p. 115, pl. 33, figs. 1-3; Trowbridge, 1932, pl. 32, fig. 1; pl. 33, figs. 1, 2 copies Gardner

*Cimomia vauhani* (Gardner), Miller and Thompson, 1933, p. 307; Stenzel, 1940a, pp. 732, 750-753; pl. 37, figs. 1, 2; text figs. 118 (1), 119 (3); Stenzel, [1942] Cephalopoda cards Nos. 10a, 10b, fig. 1, text figs. 118 (1), 119 (3); Miller, 1947, p. 47, pl. 27, fig. 1; pl. 32, figs. 1, 2; pl. 76, fig. 4; Kummel, 1956, pp. 343, 452, fig. 31N

*Hercoglossa vauhani* (Gardner), Berry, 1923, p. 429; Gardner, 1935, p. 322, pl. 27, fig. 1; pl. 28, figs. 1, 2; not F. B. Plummer, 1933, p. 817, fig. 53 (= *Woodringia splendens* Stenzel, 1940a)

*Range*.—Paleocene. Kincaid fm. (type), lower Midway gr.; Wills Point fm. (Stenzel), upper Midway gr.

*Localities*.—TEXAS: Uvalde Co., ¾ mi. NW. of Evans' (Myrick's) apiary, Frio R. (U.S.G.S. sta. 3178) (type). For additional localities see Stenzel, 1940a, and Miller, 1947

*Types*.—Holotype, No. 352261; paratype, No. 352262 USNM

**Cimomia vestali** Miller and Thompson**Hercoglossidae**

*Cimomia vestali* Miller and Thompson, 1933, p. 311, pl. 36, figs. 1, 2, text fig. 2c; Stenzel, 1940a, p. 751, text figs. 118 (3), 119 (4); Stenzel, [1942], Cephalopoda cards Nos. 11a, 11b, figs. 1, 2, 2c; Miller, 1947, p. 48, pl. 33, figs. 1, 2 holotype; Kummel, 1956, pp. 343, 452, fig. 31 K

*Range*.—Paleocene. Clayton fm. (type), lower Midway gr.

*Localities*.—MISS.: Oktibbeha Co., east bluff of Trim Cane Cr., about 3 mi. W. and a little N. of Starkville (type); Noxubbee Co., SW. bluff of Yellow Cr., about 9 mi. NW. of Macon, sec. 7, T. 15 N., R. 16 E. (paratype)

*Types*.—Holotype, No. 616; paratype, No. 617. Geol. Dept., State Univ. Iowa, Iowa City, Iowa

*Cimomia* spp., Miller, 1947

See *Hercoglossa* spp.

*Deltoidonautilus elliotti* Stenzel

See *Angulithes elliotti* (Stenzel)

*Enclimatoceras ulrichi* (White)

See *Hercoglossa ulrichi* (White)

*Enclimatoceras ulrichi* Sloan, 1908. Not White, 1884b Cretaceous

See *Eutrephoceras sloani* Reeside

*Enclimatoceras vughani* Gardner

See *Cimomia vughani* (Gardner)

#### **Eutrephoceras berryi** Miller

#### **Nautilidae**

*Eutrephoceras berryi* Miller, 1947, p. 27, pl. 7, figs. 1, 2; Kummel, 1956, pp. 333, 380

*Range*.—Upper Eocene. Castle Hayne ls., (type), Jackson gr.

*Locality*.—N.C.: New Hanover Co., City Rock quarry, near Smith Creek on the east side of Wilmington (type)

*Type*.—Holotype, No. 559584 USNM

#### **Eutrephoceras bryani** (Gabb)

#### **Nautilidae**

*Nautilus bryani* Gabb, 1877, p. 277; Whitfield, 1892, p. 244, pl. 38, figs. 5, 6; Whitfield, 1899, p. 179; Johnson, 1905, p. 28; Weller, 1907, p. 818, pl. 101, figs. 1, 2

*Eutrephoceras bryani* (Gabb), Reeside, 1924, p. 4; Miller, 1947, p. 28, pl. 8, figs. 1-4; pl. 93, figs. 1, 2

*Eutrephoceras* (?) *bryani* (Gabb), Stenzel, 1940a, p. 741, text fig. 115 (1), outline holotype; Stenzel, [1942], Cephalopoda card No. 1, figs. 1, 2 holotype, copy Weller, 1907; Kummel, 1956, pp. 333, 380

*Range*.—Lower Eocene. Vincentown fm. (type)

*Locality*.—N.J.: Burlington Co., Vincentown (type)

*Type*.—Holotype, No. 16117 ANSP (1 paratype)

#### **Eutrephoceras carolinense** Kellum

#### **Nautilidae**

*Eutrephoceras carolinense* Kellum, 1926, p. 32, pl. 7, figs. 5-7; Stenzel, 1940a, p. 741, text fig. 115 (8); Stenzel, [1942], Cephalopoda card No. 2, figs. 5, 6 holotype, fig. 7 paratype; Miller, 1947, p. 29, pl. 9, figs. 1-6; Kummel, 1956, pp. 333, 381

*Range*.—Upper Eocene. Castle Hayne ls. (type), Jackson gr.

*Localities*.—N.C.: New Hanover Co., City Rock quarry near Smith Creek; east side of Wilmington (type); Castle Hayne; Pender Co., Old Rocky Point

*Types*.—Holotype, No. 353299 USNM; paratypes, Nos. 138051, 559585-559589 USNM

**Eutrephoceras cookanum** (Whitfield)**Nautilidae**

*Nautilus cookana* Whitfield, 1892, p. 285, pl. 48, fig. 1; pl. 49, figs. 4-5, text fig. 2; Whitfield, 1899, p. 180 as *N. cooki*

*Eutrephoceras cookana* (Whitfield), Reeside, 1924, p. 4

*Eutrephoceras cookanum* (Whitfield), Stenzel, 1940a, p. 741, text fig. 115 (4); Stenzel, [1942], Cephalopoda cards Nos. 3a, 3b, figs. 1, 4, 5 syntypes, fig. 6; Miller, 1947, p. 30, pl. 10, figs. 1, 2; pl. 11, figs. 1-3; pl. 12, fig. 1; pl. 13, figs. 1, 2; Kummel, 1956, pp. 334, 381, fig. 13 O

*Range*.—Middle Eocene. Stony layer at top of Shark River ml. (type), upper Claiborne gr.

*Locality*.—N.J.: Monmouth Co., Squankum (type) (*vide* Whitfield, 1899); Shark R.

*Types*.—Syntype, No. UC 35337 CNHM; syntype, No. 9775 AMNH

*Eutrephoceras dekayi* (Morton), Johnson, 1905. Not Morton, 1834 Cretaceous

See *Eutrephoceras* sp.

*Eutrephoceras haltomi* Aldrich

See *Cimomia haltomi* (Aldrich)

**Eutrephoceras johnsoni** Miller**Nautilidae**

*Eutrephoceras johnsoni* Miller, 1947, p. 32, pl. 18, figs. 1, 2; Kummel, 1956, pp. 336, 382

*Range*.—Paleocene. Midway gr. (type)

*Locality*.—ALA.: Wilcox Co., "along Prairie Creek", Prairie Creek, W. of Oak Hill (type)

*Type*.—Holotype, No. 129552 USNM

**Eutrephoceras jonesi** Miller and Thompson**Nautilidae**

*Eutrephoceras jonesi* Miller and Thompson, 1933, p. 303, pl. 34, figs. 1, 2; Stenzel, 1940a, p. 741, text fig. 115 (5); Stenzel, [1942], Cephalopoda card No. 4, figs. 1, 2 holotype; Miller, 1947, p. 32, pl. 19, figs. 1, 2; Kummel, 1956, pp. 337, 382, fig. 13D

*Range*.—Paleocene. Midway gr. (type)

*Locality*.—ALA.: "Clarke Co.," (type)

*Type*.—Holotype, No. 55 GSATC

**Eutrephoceras reesidei** Stenzel**Nautilidae**

*Eutrephoceras* n. sp. Stenzel, 1939, pp. 132, 156

*Eutrephoceras reesidei* Stenzel, 1940a, p. 738, pl. 35, figs. 5-7; text fig. 115 (7); Stenzel, [1942], Cephalopoda card No. 5, figs. 5-7; Miller, 1947, p. 34, pl. 15, figs. 1-3 holotype; Kummel, 1956, pp. 340, 383, fig. 13 I

*Range*.—Middle Eocene. Basal conglomerate, Wheelock mem. (type), Cook Mt. fm., upper Claiborne gr.

*Locality*.—TEXAS: Leon Co., small draw tributary to a branch which flows northward along the east line of P. L. Reinhardt 200-acre tract and enters Boggy Cr., the small draw is N. of a wagon road of N. 68° E. direction and in the NE. part of the tract, in Nathaniel M. Allen and Fernando del Valle surveys, where these surveys overlap, about 3.5 mi. airline distance E. of Leona (Bur. Ec. Geol. loc. No. 145-T-50) (type)

*Type*.—Holotype, No. 20895 BEG



**Eutrephoceras sloani** Reeside**Nautilidae**

*Enclimatoceras ulrichi* Sloan, 1908, p. 319 (not 553 as in Stenzel [1942]). Not *E. ulrichi* (White), 1884b, p. 17

*Eutrephoceras sloani* Reeside, 1924, p. 3, pls. 1-3; Miller and Thompson, 1933, p. 302; Cooke, 1936, p. 43; Stenzel, 1940a, p. 741, text fig. 115 (6); Stenzel, [1942], Cephalopoda cards Nos. 6a, 6b, figs. 1-3, not p. 553 in Sloan as on card; Miller, 1947, p. 35, pl. 22, figs. 1, 2; pl. 23, fig. 1; Kummel, 1956, pp. 341, 383, fig. 13 L

*Range*.—Lower Eocene. Black Mingo fm. (type), Wilcox gr.

*Locality*.—S.C.: Georgetown Co., Perkins Bluff, on west (left) bank of Black R., 3 mi. above mouth of Black Mingo Creek (type)

*Type*.—Holotype, No. 352558 USNM not 352559 as in Reeside

*Eutrephoceras* n. sp. Stenzel, 1939

See *Eutrephoceras reesidei* Stenzel

**Eutrephoceras** sp.**Nautilidae**

*Nautilus Dekayi* Morton, Whitfield, 1892, p. 243 in part, pl. 38, figs. 3, 4 not pl. 37, figs. 1-6; pl. 38, figs. 1, 2; Whitfield, 1899, p. 180;

Weller, 1907, p. 817 in part, pl. 100, fig. 5 not pl. 100, figs. 1-4

*Eutrephoceras dekayi* (Morton), Johnson, 1905, p. 28

*Eutrephoceras* sp., Miller, 1947, p. 37, pl. 6, figs. 1-3

*Range*.—Paleocene. Hornerstown fm.

*Locality*.—N.J.: Monmouth Co., J. S. Cook's pit, near Tintonfalls

*Types*.—Figured specimens, Rutgers *vide* Whitfield, 1899

**Hercoglossa gardnerae** Stenzel**Hercoglossidae**

*Hercoglossa gardnerae* Stenzel, 1940a, pp. 733, 743, pl. 36, figs. 1, 2, text fig. 116 (3), 117 (1); Stenzel, [1942], Cephalopoda cards Nos. 12a, 12b, figs. 1-3, text fig. 1; Miller, 1947, p. 50, pl. 34, figs. 1, 2 holotype; Kummel, 1956, p. 335, 461, fig. 31 D

*Range*.—Paleocene. Upper part of Kincaid fm. (type), lower Midway gr.

*Localities*.—TEXAS: Maverick Co., S. side Cuero Cr. about 4½ mi. up from San Antonio outpost. San Antonio outpost is 0.4 mi. from Rio Grande and NE. of San Antonio crossing opposite Guerrero, Mexico (type); about 1 mi. N. Lopez tank on McFarland windmill road. (paratype)

*Types*.—Holotype and 7 paratypes, No. 30443; paratype, No. 30448 BEG

**Hercoglossa mcglameryae** Miller and Thompson**Hercoglossidae**

*Hercoglossa mcglameryae* Miller and Thompson, 1933, p. 322, pl. 38, figs. 1-2, text fig. 2 D; Stenzel, 1940a, pp. 733, 745, fig. 116 (5); p. 747, fig. 117 (6); Stenzel, [1942], Cephalopoda cards Nos. 13a, 13b, figs. 1, 2 text fig. 2 D; Miller, 1947, p. 53, pl. 13, figs. 3, 4; pl. 14, figs. 1, 2; pl. 64, fig. 4; Kummel, 1956, pp. 338, 462, fig. 31 G

*Range*.—Paleocene. "Nautilus Rock", Clayton fm. (type), lower Midway gr.

*Locality*.—ALA.: Lowndes Co. (type)

*Types*.—Holotype and paratypes, No. 56 GSATC



**Hercoglossa orbiculata** (Tuomey)**Hercoglossidae**

*Nautilus orbiculatus* Tuomey, 1854, p. 167; Conrad, 1858c, p. 335; Whitfield, 1892, p. 246

*Hercoglossa orbiculata* (Tuomey), Conrad, 1866d, p. 101; Hyatt, 1883, p. 270; Miller and Thompson, 1933, p. 315, pl. 37, figs. 1, 2; text fig. 2 F; Miller and Furnish, 1938, p. 150; Stenzel, 1940a, p. 745, fig. 116 (1); p. 747, fig. 117 (3); Stenzel, [1942], Cephalopoda card Nos. 14a, 14b, figs. 1, 2, 4, text fig. 2 F; Miller, 1947, p. 55, pl. 38, figs. 1, 2; pl. 39, figs. 1, 2; pl. 40, figs. 1, 2; text fig. 7 C; Kummel, 1956, pp. 339, 457, 462, fig. 33 F, pl. 27, figs. 1, 2

*Range*.—Paleocene. "Nautilus Rock", Clayton fm. (type), lower Midway gr.

*Localities*.—ALA. (type): *Wilcox Co.*, Pine Barren Creek, about 5 mi. N. of Allentown (neotype)

*Type*.—Holotype lost. Neotype, No. 612 Geol. Dept., State Univ. Iowa, Iowa City, Iowa (Miller and Thompson)

*Hercoglossa paucifex* (Cope)

See *Aturoidea paucifex* (Cope)

**Hercoglossa splendens** (Stenzel)**Hercoglossidae**

*Hercoglossa ulrichi* H. J. Plummer, 1933, p. 62. Not *H. ulrichi* (White) *vide* Stenzel, 1940a

*Hercoglossa vaughani* F. B. Plummer, 1933, p. 817, fig. 53. Not *H. vaughani* Gardner *vide* Stenzel, 1940a

*Woodringia splendens* Stenzel, 1940a, pp. 733, 755, pl. 35, figs. 1-3; figs. 120 (1), 121 (1, 3); Stenzel, [1942], Cephalopoda cards Nos. 17a, 17b, figs. 1-3, text figs. 120-122; Miller, 1947, p. 69, pl. 18, figs. 3-5

*Hercoglossa splendens* (Stenzel), Kummel, 1956, pp. 342, 462, fig. 31 E

*Range*.—Paleocene. Uppermost beds, Wills Point fm. (type), upper Midway gr.

*Locality*.—TEXAS: *Navarro Co.*, S. side Foggyhead Cr., Smith's pasture and about 0.15 mi. W. of bridge on Kerens-Round Prairie rd., 3.8 mi. by road SSE. of depot in Kerens (Bur. Ec. Geol. sta. 174-T-6) (type)

*Type*.—Holotype, missing, 1962, BEG. Not Walker Museum, Chicago as in Miller, 1947

**Hercoglossa tuomeyi** Clark and Martin**Hercoglossidae**

? *Nautilus* sp. Tuomey, 1842a, p. 156 (1842b, p. 187)

? *Nautilus* sp. Clark, 1895, p. 4; Clark, 1896, p. 63, pl. 9, fig. 1

*Hercoglossa tuomeyi* Clark and Martin, 1901, p. 122, pl. 18, fig. 1; ? pl. 19, fig. 2, fig. 3 copy Clark, 1896, not pl. 17, pl. 19, fig. 1 (= *Cimomia marylandensis* Miller and Thompson); Berry, 1923, p. 428; Miller and Thompson, 1933, pp. 305+footnote, 314, 323; Stenzel, 1940a, pp. 732, 746, fig. 117 (7) in part; Stenzel, [1942], Cephalopoda card No. 15, fig. (pl. 18) copy Clark and Martin; Miller, 1947, p. 59, pl. 41 holotype; pl. 42, figs. 3, 4; Kummel, 1956, pp. 343, 462

*Range*.—Lower Eocene. Upper part Woodstock greensand marl mem. (type), Nanjemoy fm.

*Locality*.—MD.: *Charles Co.*, bluff about 1 mi. below Popes Cr., left bank Potomac R. (type)

*Types*.—Lectotype (Miller and Thompson, 1933, p. 305), USNM

*Hercoglossa tuomeyi* Clark and Martin in part

See also *Cimomia marylandensis* Miller and Thompson

**Hercoglossa ulrichi** (White)**Hercoglossidae**

*Nautilus texanus* Shumard, White, 1882, p. 137. Not *N. texanus* Shumard, 1860, p. 590

*Enclimatoceras ulrichi* White, Hyatt, 1883, p. 270 *nomen nudum*

*Enclimatoceras (Nautilus) ulrichi* White, 1884b, p. 17, pl. 7, figs. 1-3; pl. 8, fig. 1; pl. 9, fig. 1; Harris, 1894b, p. 36, pl. 2, figs. 1-3; Schuchert, et al., 1905, p. 241

*Enclimatoceras ulrichi* White, Harris, 1896, p. 236, pl. 13, figs. 1-3; pl. 14, fig. 1; pl. 15, fig. 1; Veatch, 1906, p. 34, pl. 16, figs. 1, 1a, 1b copies White

*Hercoglossa ulrichi* (White), Foord and Crick, 1890, p. 392; Berry, 1923, p. 428; Deussen, 1924, p. 43, pl. 14, figs. 1, 1a, 1b (copies White); Miller and Thompson, 1933, p. 319 text fig. 2 E (pp. 308, 309); Stenzel, 1940a, pp. 744-748, fig. 116 (4), fig. 117 (4, 5); Stenzel, [1942], Cephalopoda cards Nos. 16a, 16b, 5 figs. copies White, 1884; Shimer and Shrock, 1944, p. 549, pl. 225, figs. 7-9; Miller, 1947, p. 60, pl. 43, fig. 1; pl. 44, figs. 1, 2 holotype, 3, 4; pl. 45, figs. 1, 2 see for further references; Kummel, 1956, pp. 343, 462, fig. 31 B

*Range*.—Paleocene. Clayton fm. lower Midway gr. (Texas, Ark. Miss., Ala., Tenn.)

*Localities*.—ARK.: *Pulaski Co.*, vicinity of Olsen's switch on Missouri Pacific R.R., on Fourche Cr. near mouth of Crooked Cr., NW.  $\frac{1}{4}$ , SE.  $\frac{1}{4}$ , sec. 8, T. 1 S., R. 13 W., about 10 mi. SW. of Little Rock (Harris, 1894b) (type). For further localities see Miller, 1947, p. 61

*Types*.—Holotype and paratypes, No. 8349 USNM; paratypes, Nos. 12346, 18711 USNM

*Hercoglossa ulrichi* H. J. Plummer, 1933, p. 62. Not White, 1884

See *Hercoglossa splendens* (Stenzel)

*Hercoglossa vauhani* (Gardner)

See *Cimomia vauhani* (Gardner)

*Hercoglossa vauhani* F. B. Plummer, 1933. Not Gardner, 1923

See *Hercoglossa splendens* (Stenzel)

**Hercoglossa walteri** Miller**Hercoglossidae**

*Hercoglossa walteri* Miller, 1947, p. 62, pl. 46, figs. 1, 2; Kummel, 1956, pp. 343, 462

*Range*.—Paleocene. "Nautilus Rock" Clayton fm. (type), lower Midway gr.

*Locality*.—ALA.: *Wilcox Co.*, in creek bed S. of Alabama Highway 96, about 13 mi. NE. Kimborough (type)

*Type*.—Holotype, No. 1085, Geol. Dept., State Univ. Iowa, Iowa City, Iowa

**Hercoglossa, n. sp.****Hercoglossidae**

*Hercoglossa n. sp.* Stenzel, 1940a, pp. 733, 749; Miller, 1947, p. 64

*Range*.—Middle Eocene. Tyus mem., Weches fm., middle Claiborne gr.

*Locality*.—TEXAS: *W. Houston Co.*, Kickapoo Shoals, flat bench in bed of Trinity R. at sharp bend 1.72 mi. upstream from toll bridge, Ramon de la Garza Survey (Bur. Ec. Geol. loc. 113-T-16)

*Type*.—Unfigured specimen, missing 1962, BEG

**Hercoglossa or Cimomia sp.****Hercoglossidae**

*Hercoglossa* sp. Gardner, 1935, p. 322

*Hercoglossa* or *Cimomia* sp., Miller, 1947, p. 64

*Range*.—Paleocene. Littig glauconitic mem., Kincaid fm., lower Midway gr.

*Locality*.—TEXAS: *Guadalupe Co.*, small branch 2.8 SW. of Staples, 5 mi. E. of Zorn (USGS sta. 13244)

*Type*.—Unfigured specimen not seen USNM

**Hercoglossa sp. or Cimomia sp.****Hercoglossidae**

*Hercoglossa* sp. or *Cimomia* sp. Miller, 1947, p. 113, pl. 99, figs. 1, 2

*Range*.—Lower Eocene. Nanjemoy fm.

*Locality*.—MD.: *Charles Co.*, bluff Potomac R., ½ mi. below Popes Creek

*Type*.—Figured specimen, No. 371891 USNM

*Megasiphonia alabamensis* (Morton)

See *Aturia alabamensis* (Morton)

*Nautilopsis Vanuxemi* Conrad

See *Aturia vanuxemi* (Conrad)

*Nautilus alabamensis* Morton

See *Aturia alabamensis* (Morton)

*Nautilus bryani* Gabb

See *Eutrephoceras* ? *bryani* (Gabb)

*Nautilus cookana* Whitfield

See *Eutrephoceras cookanum* (Whitfield)

*Nautilus dekayi* Morton, Whitfield, 1892 in part. Not Morton, 1834, Cretaceous

See *Eutrephoceras* sp.

*Nautilus orbiculatus* Tuomey

See *Hercoglossa orbiculata* (Tuomey)

*Nautilus texanus* Shumard, White, 1882. Not Shumard, 1860

See *Hercoglossa ulrichi* (White)

*Nautilus zig-zag* [sic] "(Sow.)", Conrad, 1848b

See *Aturia vanuxemi* (Conrad)

*Nautilus* sp. Clark, 1895 and 1896

See *Hercoglossa tuomeyi* Clark and Martin

See also *Cimomia marylandensis* Miller and Thompson

**"Nautilus" sp.**

*Nautilus* fragment Harris, 1899a, p. 103, pl. 12, fig. 26; Brann and Kent, 1960, p. 587

*Range*.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.

*Locality*.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R.

*Type*.—Figured specimen No. 1390 PRI

- Nautilus* sp. Tuomey, 1842a, p. 156 and 1842b, p. 187  
 See *Hercoglossa tuomeyi* Clark and Martin  
 See also *Cimomia marylandensis* Miller and Thompson
- Nautilus* sp. Aldrich, 1886, p. 60; de Gregorio, 1890, p. 14  
 See *Cimomia haltomi* (Aldrich)
- Pelagus vanuxemi* (Conrad)  
 See *Aturia vanuxemi* (Conrad)
- Sepia* (*Belosepia*) *ungula* Gabb  
 See *Belosaepia ungula* Gabb
- Woodringia splendens* Stenzel  
 See *Hercoglossa splendens* (Stenzel)

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GLOSSARY OF STRATIGRAPHIC TERMS USED IN THIS  
CATALOGUE

The notes are written in the following sequence: name of formation as presently used, author, original date with publication, type locality, and age. For further details see Wilmarth, 1938, U.S.G.S., Bull. 896; Wilson, *et al.*, 1957, U.S.G.S., Bull. 1056 A, and Fisher, 1961

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- Black Mingo fm.*—E. Sloan, 1905, S.C. Geol. Sur., geognostic map S.C.; 1907, Sum. Min. Res. S.C., pp. 12, 16, Black Mingo Creek, Black R., Clarendon Co., S.C., lower Eocene.
- Bumpnose ls.*—W. E. Moore, 1955, Fla. Geol. Sur., Bull. 37, p. 30 along Bumpnose rd., N. and W. of Marianna, Jackson Co., Fla., upper Eocene, upper Ocala gr. (uppermost Jackson Eocene).
- Cane R. [glauconitic ml.] fm.*—W. C. Spooner, 1926, A.A.P.G., Bull., vol. 10, No. 1, p. 7; No. 3, pp. 220, 224, 227, 235, 236, Cane R. at Natchitoches, Natchitoches Par., La., middle Eocene, middle Claiborne gr.
- Castle Hayne ls.*—B. L. Miller, 1910, G.S.A., Bull., vol. 20, pp. 674-675, Castle Hayne, New Hanover Co., N.C., upper Eocene, Jackson gr.
- Claiborne gr.*—"Claiborne sands", T. A. Conrad, 1847, Acad. Nat. Sci., Phila., Proc., vol. 3, pp. 280-282 not described, Claiborne Bluff, Alabama R., Monroe Co., Ala., middle Eocene. "Claiborne sand" replaced by Gosport sd., Smith, 1907.
- Clayton fm.*—D. W. Langdon, 1891, G.S.A., Bull., vol. 2, pp. 589-605, Clayton, Barbour Co., Ala., Paleocene, lower Midway gr.
- Cook Mt. fm.*—W. Kennedy, Texas Geol. Sur., 3d Ann. Rept., pp. 54-57, Cook Mt., Houston Co., Texas, middle Eocene, upper Claiborne gr.
- Cooper ml.*—M. Tuomey, 1848, Agr. Sur. S. C., 1st Rept., pp. 162-169, 190, 211; Sloan, 1908, S. C. Geol. Sur., ser. 4, Bull. 2, p. 462, Cooper R., Berkeley Co., S.C., upper Eocene, Jackson gr. or Oligocene (Cooke and MacNeil, 1952)
- Crockett fm.*—A. C. Ellisor, 1929, A.A.P.G., Bull., vol. 13, p. 1340, proposed by E. A. Wendlandt and G. M. Knebel, Crockett, Houston Co., Texas, middle Eocene, upper Claiborne gr. Upper part replaced by Cook Mt., see Stenzel, Krause, and Twining, 1957, p. 18.

- Crystal River fm.*—H. S. Puri, 1953, Jour. Sed. Petrology, vol. 23, No. 2, p. 130 (abst.), Crystal River, Citrus Co., Fla., upper Eocene, upper Ocala gr.
- Danville Landing beds.*—M. A. Hanna, D. Gravell, and J. McGuirt, 1934, 11th Ann. Field Trip Shreveport Geol. Soc., table 0 pp. 30, pp. 35-37, Danville Landing, Ouachita R., Catahoula Par., La., upper Eocene, uppermost Jackson gr.
- Fayette beds.*—E. T. Dumble and R. A. F. Penrose, Jr., 1890, Texas Geol. Sur., 1st Ann. Rept., pl. 3, pp. XXXIII, 17, 47, south of La Grande, Fayette Co., Texas, upper Eocene. Classified as gr. by Murray (1961). (*Fayette breccia* McGee, 1884, for Fayette, Fayette Co., Iowa, Middle Devonian, has priority.)
- Greggs Landing mem.*—E. A. Smith, 1886, Ala. Geol. Sur., Bull. 1, p. 12, Greggs Landing, Alabama R., NW. Monroe Co., Ala., lower Eocene, Tuscahoma fm., middle Wilcox [Sabine] gr.
- Gosport sd.*—E. A. Smith, 1907, Geol. Sur. Ala., Bull. 9, pp. 5, 18, Gosport [bluff], Alabama R., few mi. below Claiborne, Clarke Co., Ala., [famous Claiborne ferruginous, glauconitic sands], middle Eocene, uppermost Claiborne gr.
- Hall Summit fm.*—G. E. Murray, Jr., 1941, (abst.) A.A.P.G., Bull., vol. 25, No. 5, pp. 941, 942; G. E. Murray, Jr., and E. P. Thomas, 1945, A.A.P.G., Bull., vol. 29, No. 1, pp. 58-60, Hall Summit, T. 14 N., R. 9 W., Red River Par., La., Paleocene, upper Midway gr.
- Hatchetigbee fm.*—E. A. Smith and L. C. Johnson, 1887, U.S.G.S., Bull. 43, pp. 39-43, Hatchetigbee Bluff, Tombigbee R., N.E. Washington Co., Ala., lower Eocene, upper Wilcox [Sabine] gr.
- Hornerstown fm.*—W. B. Clark, 1907, Johns Hopkins Univ. Circ., n.s., No. 7, whole No. 199, p. 3 (to replace *Sewell* which was preoccupied), Hornerstown, Monmouth Co., N.J., Paleocene.
- Hurricane lentil.*—H. B. Stenzel, 1940, A.A.P.G., Bull., vol. 24, No. 9, pp. 1670 1675 Hurricane Bayou bed of creek 0.2-0.5 mi. up creek from bridge on Crockett-Rusk county rd., 3.55 mi. N.E. of Crockett, Houston Co., Texas, middle Eocene, Landrum mem., Cook Mt. fm., upper Claiborne gr.
- Indio fm.*—A. C. Trowbridge, U.S.G.S., Prof. Pap. 131 D, pp. 89-91, old Indio ranch, Maverick and Dimmit counties, Texas, lower Eocene, Wilcox [Sabine] gr.
- Inglis fm.*—E. O. Vernon, 1951, Fla. Geol. Sur., Bull. 33, pp. 115-140, vicinity of Inglis, along Withlacoochee R., Levy Co., upper Eocene, lower Ocala gr.
- Jackson gr.*—Jackson fm., T. A. Conrad, 1856, Acad. Nat. Sci. Phila., Proc. vol. 7, pp. 257, 258, Jackson, Pearl R. and Moodys Br., Hinds Co., Miss. upper Eocene. Originally as formation.
- Kerens mem.*—F. B. Plummer, Univ. Texas, Bull. 3232, pp. 530, 559, 562, Trinity R., N. of St. Louis and SW. R.R., E. of Kerens, Navarro Co., Texas, Paleocene, Wills Point fm., upper Midway gr.
- Kimbrel bed.*—T. L. Casey, 1902, Sci., n.s., vol. 15, p. 716, T. W. Kimbrel estate, s. of Montgomery, Grant Par., La., upper Eocene, lower Jackson gr.
- Kincaid fm.*—J. A. Gardner, 1933, A.A.P.G., Bull., vol. 17, No. 6, p. 744, Kincaid ranch (Lewis ranch), 3/4 mi. above Bob Evans' apiary to Wills Point contact, to 1/4 mi. below it, Uvalde Co., Texas, lower Midway gr. See under Miscellaneous Stratigraphic Notes.
- Landrum mem.*—H. B. Stenzel, 1938 [1939], Texas Univ. Bur. Ec. Geol.,

- Pub. 3818, pp. 20, 125, 134-148, Two-Mile Cr., J. L. Landrum survey, near Two-Mile Church, Leon Co., Texas, middle Eocene, Cook Mt. "fm.", upper Claiborne gr.
- Laredo fm.*—J. A. Gardner, 1938, Wash. Acad. Sci., Jour., vol. 28, No. 7, pp. 297, 298, Laredo, Webb Co., Texas, middle Eocene, upper Claiborne gr.
- Lisbon fm.*—T. H. Aldrich 1886, Ala. Geol. Sur., Bull. 1, pp. 44-60, Lisbon Bluff, Alabama R., Monroe Co., (not Clarke Co. as in Wilmarth, 1938, p. 1190), Ala., middle Eocene, middle, upper Claiborne gr. The name Lisbon fm. is preoccupied by Lisbon fm., Hitchcock, 1874, NW. New Hamp., Ordovician or Cambrian, Wilmarth, 1938, p. 1189.
- Littig mem.*—F. B. Plummer, 1933, Univ. Texas, Bull. 3232, pp. 530, 536, S. side Wilbarger Cr., on road 1 1/2 mi. S-SW. of Littig, Travis Co., Texas, Paleocene, Kincaid fm., lower Midway gr.
- "Logansport fm."*—See under Miscellaneous Stratigraphic notes.
- Manasquan fm.*—W. B. Clark, 1893, N.J. Geol. Sur., Ann. Rept., 1892, pp. 205-208, Manasquan R., Monmouth Co., N.J., lower Eocene.
- Marquez shale mem.*—H. B. Stenzel, 1938, [1939], Texas Univ. Bur. Ec. Geol., Pub. 3818 pp. 71-78, near Marquez, Leon Co., Texas, middle Eocene, Reklaw fm., lower Claiborne gr.
- Marthaville fm.*—B. W. Blanpied and R. T. Hazzard, 1939, Shreveport Geol. Soc. Guidebook, 14th Ann. Field Trip, p. 128, Marthaville, NW. Natchitoches Par., La., lower Eocene, lower Wilcox [Sabine] gr.
- Matthews Landing mem.*—E. A. Smith and L. C. Johnson, 1887, U.S.G.S., Bull. 43 pp. 57-60, Matthews Landing, Alabama R., Wilcox Co., Ala., Paleocene, Porters Creek fm., upper Midway gr.
- McBean fm.*—J. O. Veatch and L. W. Stephenson, 1911, Ga. Geol. Sur., Bull. 28, pp. 60, 237-284, McBean on McBean Cr., Richmond Co., E. Ga., middle Eocene, upper Claiborne gr.
- Meridian fm.*—W. J. McGee, 1891, U.S.G.S., 12th Ann. Rept., pt. 1, pp. 413-415, 491, Meridian, Lauderdale Co., Miss., middle Eocene, lower Claiborne gr. Replaced by *Tallahatta fm.*
- Mexia mem.*—F. B. Plummer, 1933, Univ. Texas, Bull. 3232, pp. 530, 559, 561, clay pit, brickyard, W. Mexia, Limestone Co., Texas, Paleocene, Wills Point fm., upper Midway gr.
- Midway gr.*—G. D. Harris, 1894, Amer. Jour. Sci., 3d ser., vol. 47, pp. 303, 304; 1896, Bull. Amer. Paleont., vol. 1, No. 4, pp. 10-38, Midway Landing, Alabama R., Wilcox Co., Ala., Paleocene. Has been used as fm.
- Moodys Branch fm.*—O. Meyer, 1885, Amer. Jr. Sci., 3d ser., vol. 30, p. 435, Moodys Branch, Pearl R., Jackson, Hinds Co., Miss., upper Eocene, lower Jackson gr.
- Mount Selman fm.*—W. Kennedy, 1892, Texas Geol. Sur., 3d Ann. Rept., pp. 45, 52-54, Mount Selman, Cherokee Co., Texas, middle Eocene, middle Claiborne gr.
- Mount Tabor sh. mem.*—H. B. Stenzel, 1938 [1939], Univ. Texas, Bur. Ec. Geol., Geol. Pub. 3818, pp. 151-154, Mount Tabor school cemetery, E. side U.S. highway 75, Madison Co., Texas, middle Eocene, Cook Mt. fm., upper Claiborne gr.
- Naheola fm.*—E. A. Smith and L. C. Johnson, 1887, U.S.G.S., Bull. 43, pp. 57-60, Naheola, Tombigbee R., Choctaw Co., Ala., Paleocene, upper Midway gr.
- Nanajalia fm.*—E. A. Smith and L. C. Johnson, 1887, U.S.G.S., Bull. 43,



- pp. 51-57, Nanafalia Landing, Tombigbee R., Marengo Co., Ala., lower Eocene, lower Wilcox [Sabine] gr.
- Nanjemoy fm.*—W. B. Clark and G. C. Martin, 1901, Md. Geol. Sur., Eocene, p. 58, Nanjemoy Cr., Charles Co., Md., lower Eocene.
- Ocala ls.*—W. H. Dall, 1892, U.S.G.S., Bull. 84, pp. 103, 157, 331, Ocala, Marion Co., Fla., Upper Eocene, Jackson gr., "Ocala gr."
- Pendleton Ferry fm.*—See Miscellaneous Stratigraphic notes.
- Pisgah mem.*—F. B. Plummer, 1933, Univ. Texas, Bull. 3232, pp. 530, 535, 536, 540, Pisgah Ridge, Navarro Co., on road between Richland and Wortham, 6 mi. N. of Limestone Co. line, Texas, Paleocene, Kincaid fm., lower Midway gr.
- Porters Creek fm.*—J. M. Safford, 1864, Amer. Jour. Sci., 2d ser., vol. 37, pp. 361, 368, Porters Creek, W. of Middleton, Hardeman Co., Tenn., Paleocene, upper Midway gr., see *Sucarnoochee clay* in Ala.
- Queen City fm.*—W. Kennedy, 1892, Texas Geol. Sur., 3d Ann. Rept., pp. 50-52, Queen City, Cass Co., Texas, middle Eocene, lower Claiborne gr.
- Reklaw fm.*—E. A. Wendlandt and G. M. Knebel in A. C. Ellisor, 1929, A.A.P.G., Bull., vol. 13, p. 1342, Reklaw, Cherokee Co., Texas, middle Eocene, lower Claiborne gr.
- [*Sabine gr.*].—A. C. Veatch, 1905, La. Geol. Sur., Bull. 1, pt. 2, pp. 84, 85, 88, Sabine River, Sabine Co., Texas and Sabine Par., La., lower Eocene. Sabine fm. replaced by U.S.G.S. with Wilcox. See Wilmarth, 1938, pt. 2, p. 1862 for history. The name has priority over Wilcox.
- Sabinetown fm.*—F. B. Plummer, 1933, Univ. Texas, Bull. 3232, pp. 530, 602, Sabinetown Bluff, Sabine R., Sabine Co., Texas, lower Eocene, upper Wilcox [Sabine] gr.
- Saline Bayou mem.*—A. C. Ellisor, 1929, A.A.P.G., Bull., vol. 13, p. 1339, Saline Bayou, St. Maurice, Winn Par., La., middle Eocene, upper Cook Mt. fm., upper Claiborne gr.
- Santee ls.*—E. Sloan, 1905, S.C. Geol. Sur. geognostic map, [published 1908, S.C. Geol. Sur., ser. 4, Bull. 2], Santee R., South Carolina [unofficially Eutaw Springs, Orangeburg Co.], (formerly regarded as Jackson upper Eocene), middle Eocene, upper Claiborne group (Cooke and MacNeil, 1952).
- Sequin fm.*—F. B. Plummer, 1933, *ibid.*, p. 574, Moss Branch, 10 mi. NW. of Bastrop, 1 mi. N. of old Caldwell village, Bastrop Co., Texas, lower Eocene, lowermost Wilcox [Sabine] gr.
- Shark River ml.*—T. A. Conrad, 1865f, Acad. Nat. Sci. Phila., Proc., vol. 17, pp. 70-73, Shark River, Monmouth Co., N.J., middle Eocene, upper Claiborne gr.
- Stone City beds.*—H. B. Stenzel, 1936, Univ. Texas, Bull. 3501, pp. 267-279, Stone City Bluff (Moseley's Ferry or San Antonio Ferry), Brazos R., Burleson Co., Texas, middle Eocene middle Claiborne gr.
- Sucarnoochee cl.*—E. A., Smith 1892, Sketch Geol. Ala., pam., 36 pp., Birmingham, Ala., Black Bluff, Sucarnoochee Cr., Sumter Co., Ala., Paleocene, upper Midway gr. Part of Porters Creek fm.
- Tallahatta fm.*—W. H. Dall, 1898, U.S.G.S., 18th Ann. Rept., pt. 2, p. 344 chart opp. p. 334, Tallahatta Hills, Choctaw Co., Ala., middle Eocene, lower Claiborne gr.
- Tehuacana mem.*—G. D. Harris, 1896, Bull. Amer. Paleont., vol. 1, No. 4, pp. 129, 155, Tehuacana, Limestone Co., Texas, Paleocene, Kincaid fm., lower Midway gr.



- Tullos mem.*—H. N. Fisk, 1938, La. Dept. Cons., Geol. Bull. 10, pp. 78, 98, 99, Tullos, La Salle Par., La., upper Eocene, Yazoo clay, upper Jackson gr.
- Tusahoma fm.*—E. A. Smith, 1888, Ala. Geol. Sur. Rept. Prog., 1884-88, geog. map. Ala., Tusahoma, Tombigbee R., Choctaw Co., Ala., lower Eocene, middle Wilcox [Sabine] gr.
- Tyus mem.*—H. B. Stenzel, 1938 [1939], Texas Univ. Bur. Econ. Geol., Pub. 3818, p. 101, cut abandoned Houston and Texas Cen. R.R., 0.4 mi. N. Robbins crossroads, Leon Co., Texas, middle Eocene, Weches fm., middle Claiborne gr.
- Viesca mem.*—H. B. Stenzel, 1938 [1939], Texas Univ. Bur. Econ. Geol., Pub. 3818, pp. 20, 97, 104-107, Texas, middle Eocene, Weches fm., middle Claiborne gr.
- Vincentown fm.*—W. B. Clark, R. M. Bagg, and G. B. Shattuck, 1897, G.S.A., Bull., vol. 8, pp. 316-338, Vincentown, Burlington Co., N.J., lower Eocene.
- Weches fm.*—E. A. Wendlandt and G. M. Knebel in A. C. Ellisor, 1929, A.A.P.G., Bull., vol. 13, p. 1341, Crockett rd., 1 1/2 mi. SW. Weches, Houston Co., Texas, middle Eocene, middle Claiborne gr.
- Wheelock mem.*—H. B. Stenzel, 1938 [1939], Texas Univ. Bur. Econ. Geol., Pub. 3818, pp. 20, 125-134, Wheelock Prairie in Brazos and Robertson Counties, Texas, middle Eocene, Cook Mt. fm., upper Claiborne gr.
- White Bluff fm.*—W. H. Dall, 1898, U.S.G.S., 18th Ann. Rept., pt. 2, p. 343, table opp. p. 334, White Bluff, Arkansas R., Jefferson Co., SE. Ark., upper Eocene, lower Jackson gr.
- Wills Point fm.*—R. A. F. Penrose, Jr., 1890, Texas Geol. Sur., 1st Ann. Rept., pp. XLIII, 17, 19, Wills Point, Van Zandt Co., Texas, Paleocene, upper Midway gr.
- Woodstock greensand ml. mem.*—W. B. Clark, 1895, Johns Hopkins Univ. Circ., vol. 15, No. 121, p. 3, Woodstock, old estate above Mathias Point, Potomac R., King George Co., Va., lower Eocene, Nanjemoy fm.
- Yazoo clay.*—E. N. Lowe, 1915, Miss. Geol. Sur., Bull. 12, p. 79, Yazoo City, Yazoo Co., Miss., upper Eocene, upper Jackson gr.
- Yegua fm.*—E. T. Dumble, 1892, Brown coal and lignite of Texas, pp. 124, 148-154, mouth of Yegua Creek, Brazos R., E. Burleson Co., Texas, [Elm Creek, Yegua R., Lee Co., Texas, Dumble, 1918, Texas Univ. Bull. 1869, pp. 102-106], middle Eocene, uppermost Claiborne gr. Nonmarine.

| Paleocene | Lower Eocene                                                                                                                                                         | Middle Eocene                                                                                                                                            |                                                   | Upper Eocene                                                                                     |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------|
|           |                                                                                                                                                                      | L.M.U. Claiborne gr.                                                                                                                                     | Gosport sd.                                       |                                                                                                  |
|           | Acanthocardia hatchetig-<br>beensis                                                                                                                                  | Abra petropolitana<br>Adrana aldrichiana                                                                                                                 | Abra nitens                                       | Abra nitens jacksonica<br>Aequipten perplanus<br>"var."                                          |
|           | A. tuomeyi                                                                                                                                                           | Agnocardia claibornensis*<br>A. sp.<br>Alectryonia johnsoni<br>A. ludoviciana<br>A. vicksburgensis mortoni                                               | Agnocardia claibornensis                          | A. suwanensis                                                                                    |
|           | Amusium cf. squamulum<br>(Paris Basin sp.)<br>Anapteris regalis<br>Anomia marylandica*<br>A. navicelloides<br>A. sp.<br>Arca hatchetigbeensis<br>A. quindecimradiata | Alveinus minutus<br>"Anodontia" augustana<br>Anomia ephippioides<br>A. hammetti<br>A. lisbonensis<br>Arca petropolitana                                  | Alveinus minutus                                  | A. vicksburgensis mortoni*<br>A. v. "vars."<br>Alveinus minutus*<br>Amusium ocalanum             |
|           | Amusium alabamense                                                                                                                                                   |                                                                                                                                                          |                                                   | Anomia jugosa<br>A. sp.                                                                          |
|           | Anomia marylandica<br>A. rufa                                                                                                                                        |                                                                                                                                                          |                                                   | Arca spp.<br>Arcoperna filosa<br>A. sp.<br>"Astarte" triangulata<br>(Olig.?)                     |
|           | Arca spp.                                                                                                                                                            |                                                                                                                                                          | Astarte americana<br>"A." callosa<br>"A. proruta" | Atrina jacksoniana<br>A. quadrata<br>A. sp.<br>Barbatia aspera*<br>B. corvannis<br>B. cuculoides |
|           | "Astarte" marylandica<br>"A." subpontis<br>"A." sp.                                                                                                                  | "Astarte" castanella<br>"A." newtonensis<br>"A." planimarginata<br>"A." triangulatoideis<br>Atrina cavcavensis<br>A. grvida<br>A. sp.<br>Barbatia aspera |                                                   |                                                                                                  |
|           | Atrina gardnerae                                                                                                                                                     | Atrina rostriformis<br>A. spp.                                                                                                                           |                                                   |                                                                                                  |
|           | Barbatia cuculoides<br>"var."                                                                                                                                        |                                                                                                                                                          |                                                   |                                                                                                  |
|           | B. lignitifera                                                                                                                                                       | B. deusseni                                                                                                                                              |                                                   | B. inglistia                                                                                     |

| Paleocene | Lower Eocene              | Middle Eocene           |                       | Upper Eocene                |
|-----------|---------------------------|-------------------------|-----------------------|-----------------------------|
|           |                           | L.M.U. Claiborne gr.    | Gosport sd.           |                             |
|           | B. ludoviciana*           | B. ludoviciana          |                       | B. ludoviciana              |
|           |                           | B. rhomboidella         |                       | B. palmerae                 |
|           |                           | B. r. parsaba           |                       | B. cf. rhomboidella "vars." |
|           |                           | B. r. subscopula        |                       |                             |
|           |                           | B. uxorispalmeri        |                       |                             |
|           |                           | B. vaughani             |                       | B. seraperta                |
|           |                           | B. spp.                 |                       |                             |
|           | Basterotia prima          | Bathytermus clarkensis* |                       | Bathytermus clarkensis      |
|           |                           | B. c. ferrocrolinus     |                       | B. c. postclarkensis        |
|           |                           | B. c. ludovicianus      |                       | B. flexurus                 |
|           |                           |                         |                       | B. f. productus             |
|           |                           |                         |                       | B. protexus sinus           |
|           |                           |                         |                       | Biocorbula pearlensis       |
|           |                           |                         |                       | Cf. Blagroveia gunteri*     |
|           | Bornia prima              | Cf. Blagroveia gunteri  | Bornia plectopygia    |                             |
|           |                           | Bornia isosceles        | B. scintillata        |                             |
|           |                           | B. perdita              |                       |                             |
|           | Brachidontes alabamensis  | B. zapataensis          |                       |                             |
|           |                           | Brachidontes texanus    |                       |                             |
|           |                           | B. sp.                  |                       |                             |
|           | Brachidontes potomacensis |                         |                       |                             |
|           | B. stubbsi                |                         |                       |                             |
|           | Cf. B. saffordi           |                         |                       |                             |
|           |                           | Caestocorbula fossata*  | Caestocorbula fossata | Caestocorbula wailesiana    |
|           |                           |                         | Cf. C. munchisoni     |                             |
|           |                           |                         | Callista aequorca     | Callista annexa             |
|           |                           |                         | C. aldfichi           | C. pearlensis               |
|           |                           |                         | C. mortoni            |                             |
|           |                           |                         | C. perovata*          |                             |
|           |                           | Callista perovata       |                       |                             |
|           |                           | C. p. lisbonensis       |                       |                             |
|           |                           | C. p. subvitrea         |                       |                             |
|           |                           | Calorhadia bastropensis | C. p. subvitrea*      | Calorhadia albirupina       |
|           | Calorhadia acala          |                         |                       |                             |

| Paleocene                                             | Lower Eocene                 | Middle Eocene                   |                                   | Upper Eocene                  |
|-------------------------------------------------------|------------------------------|---------------------------------|-----------------------------------|-------------------------------|
|                                                       |                              | L.M.U. Claiborne gr.            | Gosport sd.                       |                               |
| <i>Calorhadia elongatoidea</i><br>"var."              | <i>C. aldrichiana</i>        | <i>C. bella</i>                 | <i>Calorhadia bella</i> *         | <i>C. mater</i>               |
|                                                       | <i>C. a. sabinetownensis</i> | <i>C. compsa</i>                |                                   |                               |
|                                                       | <i>C. elongatoidea</i> *     | <i>C. equalis</i>               | <i>C. equalis</i> *               | <i>C. cf. opulenta</i>        |
|                                                       | <i>C. e. "var."</i>          | <i>C. evanescens</i>            | <i>C. opulenta</i> *              | <i>C. reginae</i> Jacksonis   |
|                                                       | <i>C. pharida</i>            | <i>C. hammetti</i>              | <i>C. pistoriipes</i>             | <i>C. r. "var."</i>           |
|                                                       | <i>C. potomacensis</i>       | <i>C. houstonia</i>             |                                   |                               |
| <i>Cardium knappi</i> *                               |                              | <i>C. petropolitana</i>         |                                   |                               |
|                                                       | <i>Cardium knappi</i>        | <i>C. praecompsa</i>            |                                   |                               |
|                                                       | <i>C. nucleolum</i>          | <i>C. semen</i>                 | <i>C. semen</i> *                 |                               |
|                                                       |                              | <i>C. semenoides</i>            |                                   |                               |
|                                                       |                              | <i>Cardium harrisi</i>          |                                   |                               |
| <i>"C." spp.</i><br><i>Caryocorbula coloradoensis</i> |                              | <i>C. spp.</i>                  |                                   | <i>Cardium spp.</i>           |
|                                                       |                              | <i>Caryocorbula alabamensis</i> | <i>Caryocorbula alabamensis</i> * |                               |
|                                                       |                              | <i>citronella</i>               | "vars.", ima, tecla               |                               |
|                                                       |                              | <i>C. augustae</i>              | <i>C. a. gregorioid</i>           |                               |
| <i>C. kennedyi</i><br><i>C. spp.</i>                  |                              | <i>C. deusseni</i>              |                                   |                               |
|                                                       |                              | <i>C. engonatooides</i>         | <i>C. densata</i>                 | <i>Caryocorbula densata</i> * |
| <i>Chama gainesensis</i>                              |                              | <i>C. sp.</i>                   |                                   | <i>C. willistoni</i>          |
|                                                       |                              | <i>Chama harrisi</i>            |                                   | <i>C. w. arkansia</i>         |
|                                                       |                              | <i>C. monroensis</i>            |                                   | <i>Chama richardsi</i>        |
|                                                       |                              | <i>C. sp.</i>                   |                                   | <i>C. spp.</i>                |
| <i>Chlamys johnsoni</i> *                             | <i>Chlamys choctavensis</i>  | <i>Chlamys beverlyi</i>         |                                   | <i>Chlamys biddleana</i> *    |
|                                                       | <i>C. greggi</i>             | <i>C. biddleana</i>             |                                   | <i>C. cooki</i>               |
|                                                       | <i>C. seabeensis</i>         | <i>C. burlesonensis</i>         |                                   | <i>C. corvina</i>             |
|                                                       |                              | <i>C. cainei</i>                |                                   | <i>C. cushmani</i>            |
|                                                       |                              | <i>C. cawcavensis</i>           |                                   | <i>C. danvillensis</i>        |
|                                                       |                              | <i>C. clarkeana</i>             |                                   | <i>C. deshayesi dennisoni</i> |
| <i>C. sheldoniae</i>                                  |                              | <i>C. kneiskerni</i>            | <i>Chlamys deshayesi</i> *        | <i>C. dysoni</i>              |
|                                                       |                              | <i>C. pulchricosta</i>          | <i>C. sp.</i>                     | <i>C. incertae</i>            |
|                                                       |                              | <i>C. rigbyi</i>                |                                   |                               |

| Paleocene                      | Lower Eocene | Middle Eocene         |                          | Upper Eocene                  |
|--------------------------------|--------------|-----------------------|--------------------------|-------------------------------|
|                                |              | L.M.N. Claiborne gr.  | Gosport sd.              |                               |
| <i>Corbicula texana</i>        |              | <i>C. wahtubbeana</i> |                          | <i>C. indecisa</i>            |
|                                |              | <i>C. w. willcoxi</i> |                          | <i>C. membranosa</i>          |
|                                |              |                       |                          | <i>C. nupera</i>              |
| <i>Corbicula subcompressa</i>  |              |                       |                          | <i>C. spillmani</i>           |
|                                |              |                       |                          | <i>C. s. "vars."</i>          |
|                                |              |                       |                          | <i>C. s. clinchfieldensis</i> |
| <i>Corbicula ? cornelliana</i> |              |                       |                          | <i>C. sp.</i>                 |
|                                |              |                       | <i>Corbis lirata</i>     |                               |
|                                |              |                       | <i>C. undata</i>         |                               |
| <i>Corbicula subcompressa</i>  |              |                       | <i>Corbula compressa</i> | <i>Corbula aliformis</i>      |
|                                |              |                       |                          |                               |
|                                |              |                       |                          |                               |
| <i>Crassatella aquiana</i>     |              |                       |                          |                               |
|                                |              |                       |                          |                               |
|                                |              |                       |                          |                               |
| <i>C. gabbi</i>                |              |                       |                          |                               |
| <i>C. ioannes</i>              |              |                       |                          |                               |
| <i>C. sepulcollis</i>          |              |                       |                          |                               |
| <i>C. spp.</i>                 |              |                       |                          |                               |
| <i>Crassatella conradi*</i>    |              |                       |                          |                               |
|                                |              |                       |                          |                               |
|                                |              |                       |                          |                               |
| <i>C. halei</i>                |              |                       |                          |                               |
| <i>C. littoralis</i>           |              |                       |                          |                               |
| <i>C. rhombea</i>              |              |                       |                          |                               |
| <i>C. tumidula</i>             |              |                       |                          |                               |
| <i>C. spp.</i>                 |              |                       |                          |                               |
| <i>Crassatella antestriata</i> |              |                       |                          |                               |
|                                |              |                       |                          |                               |
|                                |              |                       |                          |                               |
| <i>C. conradi*</i>             |              |                       |                          |                               |
| <i>C. eutavcolens*</i>         |              |                       |                          |                               |
| <i>C. inglisia*</i>            |              |                       |                          |                               |
| <i>C. littoralis*</i>          |              |                       |                          |                               |
| <i>C. negreetensis</i>         |              |                       |                          |                               |
| <i>C. ? obliquata</i>          |              |                       |                          |                               |
| <i>C. rhomboidea (?)</i>       |              |                       |                          |                               |
| <i>C. texalta</i>              |              |                       |                          |                               |
| <i>C. texana</i>               |              |                       |                          |                               |
| <i>C. trapaquara</i>           |              |                       |                          |                               |
| <i>C. spp.</i>                 |              |                       |                          |                               |
| <i>Crassinella aldrichi</i>    |              |                       |                          |                               |
| <i>C. minor</i>                |              |                       |                          |                               |
| <i>C. pteleina</i>             |              |                       |                          |                               |
| <i>Crassostrea amichel</i>     |              |                       |                          |                               |
| <i>C. frionis</i>              |              |                       |                          |                               |
| <i>C. sp.</i>                  |              |                       |                          |                               |
| <i>Crassostrea sp.</i>         |              |                       |                          |                               |
|                                |              |                       |                          |                               |
|                                |              |                       |                          |                               |
| <i>Crassinella pygmaea</i>     |              |                       |                          |                               |
|                                |              |                       |                          |                               |
|                                |              |                       |                          |                               |
| <i>Crassostrea contracta</i>   |              |                       |                          |                               |
|                                |              |                       |                          |                               |
|                                |              |                       |                          |                               |
| <i>C. gigantissima</i>         |              |                       |                          |                               |
| <i>C. sp.</i>                  |              |                       |                          |                               |



| Paleocene                                                                                                                                  | Lower Eocene                                  | Middle Eocene                                                                                                                                                                                         | Gosport sd.                                                                                        | Upper Eocene      |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------|
|                                                                                                                                            | L.M.U. Claiborne gr.                          |                                                                                                                                                                                                       |                                                                                                    |                   |
| Cucullaea compressirostra<br>C. gigantea*<br>C. kaufmanensis<br>C. macrodonta<br>C. saffordi & "var."<br>C. texana<br>C. vulgaris (Cret.*) | Cucullaea gigantea<br>"var."<br>C. transversa | Crenella margaritacea<br>Cubiotrea divaricata<br>C. linguafelis<br>C. lisbonensis<br>C. perplicata<br>C. petropolitana<br>C. sanctiaugustini<br>C. sellaeformis*<br>C. s. "var."<br>C. smithvillensis | Crenella isocardioides<br>C. ? latifrons<br>C. margaritacea*                                       | Crenella ? tenuis |
|                                                                                                                                            | Cucullaria ozarkensis                         | Cuningia ? keittensis<br>Cuna ? astartoides                                                                                                                                                           | Cf. Cucullaria aldrichi<br>Cultellus conradi<br><br>Cuna monroensis<br>C. parva<br>C. p. fimbriata |                   |
|                                                                                                                                            | Cuspidaria prima                              | Cuspidaria aequivallis<br>C. attenuata<br>C. multiornata                                                                                                                                              | Diplodonta corbiscula<br>D. inflata*                                                               |                   |
| Diplodonta marlboronensis<br>D. sp.                                                                                                        | Diplodonta hopkinsensis<br>D. sp.             | Diplodonta inflata<br>D. petropolitana<br>D. satex                                                                                                                                                    |                                                                                                    |                   |

| Paleocene                  | Lower Eocene                  | Middle Eocene          | Upper Eocene                                                                   |
|----------------------------|-------------------------------|------------------------|--------------------------------------------------------------------------------|
|                            |                               | L.M.U. Claiborne gr.   | Gosport sd.                                                                    |
|                            |                               | D. unguina             | D. unguina*                                                                    |
| Dosiniopsis lenticularis*  | Donax acutangula              |                        | Diplodonta unguina yaz-<br>oocola                                              |
| D. l. meeki                | Dosiniopsis lenticularis      |                        | Divaricella robertsi                                                           |
| Eburneopecten dalli*       | Eburneopecten corneoides      | Eburneopecten calvatus | Eburneopecten frontalis                                                        |
|                            | E. dalli                      | E. hamiltonensis       | E. scintillatus                                                                |
|                            |                               | E. sp.                 | E. subminutus (Olig.*)                                                         |
|                            | Eophysema ozarkana*           | Eophysema cf. ozarkana | Eophysema ozarkana "var."                                                      |
|                            | Epilucina sp.                 | Eosolen lisbonensis    |                                                                                |
|                            | Ervilia lignitica*            | Cf. E. abruptus        |                                                                                |
|                            |                               |                        | Erycina zitteli                                                                |
|                            | Etea delawarensis<br>(Cret.*) |                        | ? "Euloxa" sp.<br>Exputens ocalensis<br>Fimbria vernoni<br>Flexopecten anaptes |
|                            | Gari harrisi                  | Fimbria olssoni        |                                                                                |
|                            | G. ozarkana                   | Gari eborea            | Gari jacksonensis                                                              |
|                            | G. smithi                     |                        | G. sp.                                                                         |
| Gastrochaena cimitariopsis | Gastrochaena striatula        |                        | Gastrochaena mississippi-<br>ensis<br>G.sp.                                    |

| Paleocene                                                                   | Lower Eocene                                                 | Middle Eocene                                                                                                                                                                           | Upper Eocene                                                                                                                                  |
|-----------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                             |                                                              | L.M.U. Claiborne gr.                                                                                                                                                                    | Gosport sd.                                                                                                                                   |
| <i>G. dalliana</i>                                                          |                                                              |                                                                                                                                                                                         |                                                                                                                                               |
| <i>G. gainesensis</i>                                                       |                                                              |                                                                                                                                                                                         |                                                                                                                                               |
| <i>G. spp.</i>                                                              |                                                              |                                                                                                                                                                                         |                                                                                                                                               |
| <i>Glossus mediavia</i>                                                     | <i>Gigantostrea sylvaeurupis</i><br><i>Glossus ? conradi</i> | <i>Gemma sanctimauricensis</i><br><i>Glossus ? vetus</i>                                                                                                                                | <i>Gigantostrea trigonalis</i><br><i>Glycymeris filosa</i><br><i>Glycymeris idonea</i> "vars."<br><i>G. cf. lisbonensis</i><br><i>G. spp.</i> |
| <i>Glycymeris idonea</i> subsp.<br><i>G. spp.</i>                           | <i>Glycymeris idonea</i> subsp.<br><i>G. sp.</i>             | <i>Glycymeris conradi</i><br><i>G. lisbonensis</i> *<br><i>G. petropolitana</i><br><i>G. sabinensis</i><br><i>G. trigonella minor</i><br><i>G. wautubbeana</i>                          | <i>Glycymeris idonea</i> *<br><br><i>G. staminea</i><br><i>G. trigonella</i> *<br><i>G. t. minor</i> *                                        |
| <i>Gryphaeostrea vomer</i> *                                                | <i>Gryphaeostrea vomer</i>                                   | <i>Gratelupia hydana</i><br><br><i>Hindsia faba</i><br><i>H. f. donacia</i>                                                                                                             | <i>Gryphaeostrea vomer plicatella</i><br><i>Hormomya hamatoides</i>                                                                           |
| <i>Isognomon cornelliana</i><br><i>Jupiteria jonesi</i><br><i>J. smirna</i> |                                                              | <i>Katherinella smithvillensis</i><br><i>K. ? textirina</i><br><i>K. trigoniata</i><br><i>K. t. bastropensis</i><br><i>K. trinitatis</i><br><i>K. sp.</i><br><i>Kellia interstriata</i> | <i>Katherinella trigoniata</i>                                                                                                                |
| <i>Kelliella ? aldrichi</i>                                                 |                                                              |                                                                                                                                                                                         | <i>Kelliella boettgeri</i>                                                                                                                    |

| Paleocene                                              | Lower Eocene                                                                         | Middle Eocene                                                                                                                                                  |                                                                                                              | Upper Eocene                                                                           |
|--------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|                                                        |                                                                                      | L.M.U. Claiborne gr.                                                                                                                                           | Gosport sd.                                                                                                  |                                                                                        |
| K. ? evansi<br>Kummelia americana                      | Kummelia americana*                                                                  | Laevicardium palmerae                                                                                                                                          |                                                                                                              | Laevicardium gardnerae<br>L. levyi<br>Ledina sp.<br>Lima tricincta<br>L. vicksburgiana |
|                                                        | Lepton vaughani<br>Lima ozarkana                                                     | Lima bastropensis<br>L. harristana<br>L. petropolitana<br>L. smithvillensis<br>L. sp.<br>Limopsis aviculoides ma-<br>uricensis<br>L. a. "var."<br>Linga hamata |                                                                                                              | L. sp.<br>Limopsis radiata                                                             |
| Limopsis quihí<br>L. sp.                               |                                                                                      |                                                                                                                                                                | Limopsis aviculoides*<br><br>Linga amica<br>L. carinifera<br>L. pomilia*<br>L. p. alveata<br>L. p. smith*    |                                                                                        |
| Lirodiscus mediavia                                    | Linga pomilia smithi                                                                 | Lirodiscus protractus<br>L. psychopterus<br>L. santeensis<br>L. smithvillensis*                                                                                | Lirodiscus tellinoides*                                                                                      | Lirodiscus jacksonensis<br>L. tellinoides scutellarius<br><br>Cf. L. sp.               |
| Lithophaga gainesensis<br>Cf. L. marylandica<br>L. sp. | Lirodiscus smithvillensis<br>"var."<br>L. virginianus                                |                                                                                                                                                                | Cf. Lithophaga claiboi-<br>rnensis<br>L. ? petricoloides<br>"Lucina" bisculpta<br>L. dolabra<br>L. papyracea | Lucina atoma<br>L. perminuta<br>L. spp.                                                |
| "Lucina" primoidea<br>L. uhleri<br>L. sp.              | Lucina ? astartiformis<br>L. dartoni<br>"L." sylvaerupis<br>L. uhleri*<br>L. ulrichi | Lucina sp.                                                                                                                                                     |                                                                                                              |                                                                                        |

| Paleocene                                                                             | Lower Eocene                                                                                                                                    | Middle Eocene                                                                                                                                            |                                             | Upper Eocene                               |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------------|
|                                                                                       |                                                                                                                                                 | L.M.U. Claiborne gr.                                                                                                                                     | Gosport sd.                                 |                                            |
|                                                                                       | L. whitei<br>L. sp.                                                                                                                             | Lutetia texana                                                                                                                                           | Macoma danai<br>M. scandula<br>M. sillimani |                                            |
|                                                                                       | Macrocallista subimpressa<br>M. sylvaeurypis<br>M. triangulata<br>M. ? sp.                                                                      |                                                                                                                                                          |                                             |                                            |
|                                                                                       | Mactropsis olssoni                                                                                                                              |                                                                                                                                                          | Mactropsis acquorea<br>M. retilinearis      | Mactra inornata                            |
| Martesia sp.                                                                          | Martesia elongata<br>M. recurva                                                                                                                 | Martesia ? laredoensis<br>M. texana<br>Mauricia houstonia<br>M. leonia<br>Meiocardia carolinac*<br>Mercimonia ? mer-<br>cenaroidea<br>Metis ? eutawensis |                                             | Margaritaria inexpectens                   |
|                                                                                       |                                                                                                                                                 |                                                                                                                                                          |                                             | Meiocardia carolinae<br>Mesodesma singleyi |
|                                                                                       |                                                                                                                                                 |                                                                                                                                                          | Micromeris minutissima<br>Microstagon nana  | Miltha ocalana                             |
| Cf. Miodontiscus aldrich-<br>ianus<br>Modiolus subinflatus<br>Cf. M. pontis<br>M. sp. | Cf. Miodontiscus timothii<br>Cf. M. sp.<br>Modiolus johnsoni<br>M. marylandicus<br>M. ovatus<br>M. spp.<br>Montacuta bicuspidata<br>M. herberti | Modiolus cawcawensis<br>M. sp.                                                                                                                           |                                             | Modiolus cretaceus<br>M. sp.               |
|                                                                                       |                                                                                                                                                 |                                                                                                                                                          | Montacuta claiborniana                      |                                            |



| Paleocene                                                                                                                                    | Lower Eocene                                                                                                                                                                                                             | Middle Eocene        |                               | Upper Eocene            |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------|-------------------------|
|                                                                                                                                              |                                                                                                                                                                                                                          | L.M.U. Claiborne gr. | Gosport sd.                   |                         |
| Nemocardium actium<br>N. quithi<br>N. n. sp.<br>N. spp.                                                                                      | Mysella minuta<br>Nemocardium harrisi<br>N. lene                                                                                                                                                                         | Nemocardium curtum   | Cf. Mysella dalli             | Myrtea ? curta          |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. gambrinum         | Nanohalus cossmanni           | M. ? subcurta           |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. salrivale         |                               | Nemocardium nicolletti  |
| Nucula mediavia<br>N. spp.                                                                                                                   | Nucula potomacensis<br>N. sp.                                                                                                                                                                                            | N. spp.              |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | Notocorbula texana   |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | Nucula circe         | "Nucula capsioptis"           |                         |
| Nuculana "bella var."<br>N. cliftonensis<br>N. cultelliformis<br>N. eoa<br>N. fiski<br>N. hannahae<br>N. parilis*<br>N. saffordana<br>N. sp. | Nuculana coelatella<br>N. corpulentooides<br>N. c. "var."<br>N. improcera<br>N. marieana<br>N. milamensis<br>N. parilis "var."<br>N. tysoni<br>N. sp.                                                                    | N. magnifica "var."  | Nucula magnifica* &<br>"var." | Nucula magnifica "var." |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. mauricensis       |                               | N. m. yazoensis         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. monroensis        |                               | N. sphenotopsis         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. ripae             | N. ovula                      |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. secunda           |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. smithvillensis    |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. spp.              |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | Nuculana albaria     |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. calcarensis       | Nuculana coelata              | Nuculana linifera       |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. carolinensis      |                               |                         |
| N. multilineata*<br>N. sp.                                                                                                                   | N. coelatooides<br>N. crassiparva<br>N. jewetti<br>N. kitensis<br>N. magna lisbonensis<br>N. magnopsis<br>N. multilineata<br>N. ozarkola<br>N. subtrigona<br>N. trivitate<br>N. trumani<br>N. vanuxemi<br>N. wautubbeana | N. coelatooides      |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. crassiparva       |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. jewetti           |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. kitensis          |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. magna lisbonensis | N. magna*                     |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. magnopsis         | N. plana                      |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. multilineata      |                               | N. multilineata*        |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. ozarkola          |                               | N. sp.                  |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. subtrigona        |                               |                         |
|                                                                                                                                              |                                                                                                                                                                                                                          | N. trivitate         |                               |                         |

| Paleocene                                                                                                                                                                                                                    | Lower Eocene                                                                                                             | Middle Eocene                                                                                                                                                                                                                                                                                                |                                                                                                                                                  | Upper Eocene                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
|                                                                                                                                                                                                                              |                                                                                                                          | L.M.U. Claiborne gr.                                                                                                                                                                                                                                                                                         | Gosport sd.                                                                                                                                      |                                               |
| Cf. <i>Orthoyoldia kindlei</i>                                                                                                                                                                                               | <i>Odontogryphaea thirsae</i>                                                                                            | <i>Orthoyoldia claibornensis</i><br><i>O. psammotaea</i><br><i>O. p. orangeburgensis</i><br><i>O. p. vivianensis</i><br><i>O. spp.</i>                                                                                                                                                                       |                                                                                                                                                  | <i>Orthoyoldia rubamnis</i><br><i>O. spp.</i> |
| <i>Oryctomya bryani</i><br><i>Ostrea alepidota</i>                                                                                                                                                                           | Cf. <i>Oryctomya prima</i><br><i>Ostrea artosis</i><br><i>O. bryani</i> *<br><i>O. duvali</i><br><i>O. intermedoides</i> | <i>Ostrea bryani</i><br><i>O. carolinensis</i><br><i>O. gierharti</i><br>" <i>O. p.</i> " <i>glauconoides</i><br><i>O. podagrina</i><br><i>O. semmesi</i><br><i>O. spp.</i>                                                                                                                                  | <i>Oryctomya claibornensis</i>                                                                                                                   | <i>Ostrea falco</i><br><i>O. frithi</i>       |
| <i>O. ? convexa</i> (Cret.*)<br><i>O. crenulimarginata</i><br><i>O. ? dissimilaris</i><br><i>O. kochae</i><br><i>O. multilirata</i> sabinaiensis<br><i>O. pulaskensis</i><br><i>O. tecticosta</i> (Cret.*)<br><i>O. spp.</i> | <i>O. multilirata</i> *<br><i>O. sinuosa</i><br><i>O. spp.</i>                                                           |                                                                                                                                                                                                                                                                                                              |                                                                                                                                                  | <i>O. podagrina</i><br><i>O. spp.</i>         |
|                                                                                                                                                                                                                              | <i>Pachecoa decisa</i> "var."<br><i>P. microcancellata</i>                                                               | <i>Pachecoa adamsi</i><br><i>P. cainae</i><br><i>P. catonis</i><br><i>P. decisa abbreviata</i><br><i>P. declivis</i><br><i>P. ellipsis</i><br><i>P. ledoides</i><br><i>P. lisbonensis</i><br><i>P. ovalis</i><br><i>P. pulchra</i><br><i>P. p. "vars."</i><br><i>P. sabinica</i><br><i>P. smithvillensis</i> | <i>Pachecoa decisa</i> *<br><i>P. d. "var."</i><br><i>P. ellipsis</i> *<br><i>P. ledoides</i> *<br><i>P. pectuncularis</i><br><i>P. perplana</i> | <i>Pachecoa corvannis</i>                     |



| Paleocene                                                                       | Lower Eocene                                                                         | Middle Eocene                                                                                                                                                 |                                                                                       | Upper Eocene                                                                                    |
|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|                                                                                 |                                                                                      | L.M.U. Claiborne gr.                                                                                                                                          | Gosport sd.                                                                           |                                                                                                 |
| <i>P. pyga</i><br><i>P. ? ripleyanus</i><br><i>P. spp.</i>                      | <i>P. n. greggi</i><br><i>P. n. heilprini</i><br><i>P. ovatus</i><br><i>P. vetus</i> | <i>P. macbeani</i><br><i>P. ovalis</i><br><i>P. petropolitani</i><br><i>P. texacola</i><br><i>P. texibrazus</i><br><i>P. tornadonis</i><br><i>P. spp.</i>     |                                                                                       |                                                                                                 |
|                                                                                 | <i>Cf. Plagiocardium sp.</i><br><i>Plicatula filamentosa</i><br>"var."               | <i>Plicatula filamentosa</i><br>"var."                                                                                                                        | <i>Plicatula filamentosa</i> *                                                        |                                                                                                 |
| <i>Plicatula sp.</i>                                                            |                                                                                      | <i>P. f. concentrica</i><br><i>P. f. planata</i>                                                                                                              |                                                                                       | <i>Plicatula ? louisiana</i><br><i>P. spp.</i><br><i>Poromya mississippiensis</i>               |
| "Protocardia" sp.                                                               | <i>Polorthus tibialis</i>                                                            | <i>Pseudochama sp.</i><br><i>Pseudomiltha megameris</i><br><i>Pteria ? annosa</i><br><i>P. petropolitana</i><br><i>P. sp.</i>                                 | <i>Pteria limula</i> *                                                                | <i>Pseudomiltha megameris</i> *<br>"Pteria" cf. <i>argentea</i><br><i>P. limula vanwinkleae</i> |
| <i>Pteria deusseni</i><br><i>P. spp.</i>                                        | <i>Pteria sp.</i>                                                                    | <i>Pteropsella lapidosa</i><br><i>P. praclapidosa</i><br><i>Rhabdopitaria astartoides</i><br><i>R. pricei</i><br><i>R. texangelina</i><br><i>R. winnensis</i> | <i>Pteropsella papyria</i><br><i>Rhabdopitaria discoidalis</i><br><i>R. subcrassa</i> |                                                                                                 |
|                                                                                 | <i>Saccella quercollis</i><br><i>S. sp.</i>                                          | <i>Saccella parva</i><br><i>S. robusta</i><br><i>Saxicavella alabamensis</i><br><i>Cf. Saxolucina greggi</i>                                                  | <i>Saccella ? atakta</i><br><i>S. catasarca</i>                                       | <i>Saxolucina gaufia</i>                                                                        |
| <i>Cf. Saxolucina aquiana</i><br><i>S. claytonia</i><br><i>S. fortidentalis</i> |                                                                                      | <i>Saxolucina claibornensis</i>                                                                                                                               |                                                                                       |                                                                                                 |
|                                                                                 | <i>Scintilla clarteana</i><br><i>Semele langdoniana</i>                              |                                                                                                                                                               | <i>Scintilla alabamiensis</i>                                                         |                                                                                                 |
|                                                                                 |                                                                                      | <i>Semele australina</i>                                                                                                                                      |                                                                                       |                                                                                                 |

| Paleocene                                             | Lower Eocene                                                                                                                                                                                               | Middle Eocene                                                                                                                                                                                           | Upper Eocene                                                                                                                                                                                                                                                      |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                       | L.M.U. Claiborne gr.                                                                                                                                                                                       | Gosport sd.                                                                                                                                                                                             |                                                                                                                                                                                                                                                                   |
| Siliqua ? sp.                                         | S. monroensis<br><br>Solenya alabamensis<br>Solen pendletonensis<br>S. sp.                                                                                                                                 | S. linosa*<br>S. l. "var."<br><br>Sinodia eocaenica<br>Solenya sp.<br><br>Spisula decisa palmaris<br><br>S. praetenuis australiana<br>Spondylus sp.                                                     | Semele linosa claibornensis<br><br>S. profunda<br><br><br><br><br><br>Siliqua simondsi<br><br><br><br><br><br>Spisula albirupina<br>S. jacksonensis*<br>S. mississippiensis<br>S. cf. praetenuis<br>Spondylus dumosus (Olig.)*<br>S. hollisteri<br>S. lamellacea  |
| Striarca stearnsii<br>Tellina estellensis<br>T. quihi | Sportella oblonga<br><br>Tellina bellsiana<br>T. cynoglossa<br>T. greggi<br>T. semipapyria<br>T. semitotunda<br>T. subtriangularis<br>T. temperata<br>T. sp.<br>T. virginiana*<br>T. williamsi*<br>T. spp. | Sportella ? divaricata<br><br>Tellina aldrichi<br>T. cherokeensis<br><br><br><br><br><br>T. leana<br>T. l. praegravis<br>T. l. sabotica<br>T. l. yeguada<br>T. makelloides<br>T. mooreana<br>T. papyria | Sportella alabamensis<br>S. greggioi<br>Cf. Striarca harrisi<br>Tellina alta<br>T. cosmanni<br>T. cynoglossula<br>T. entaenia<br>T. e. equator<br>T. leana*<br>T. plana<br>T. prolenta<br><br><br><br><br><br>Tellina eburneopsis<br>T. linifera<br>T. pearlensis |



| Paleocene                   | Lower Eocene                              | Middle Eocene                                                                                                                                                            |                                                       | Upper Eocene                                                                                                                                                                                                                                                                   |
|-----------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             |                                           | L.M.U. Claiborne gr.                                                                                                                                                     | Gosport sd.                                           |                                                                                                                                                                                                                                                                                |
|                             |                                           | <i>T. petropolitana</i><br><i>T. raveneli</i> *<br><i>T. santander</i><br><i>T. subequalis</i><br><i>T. tallicheti</i><br><i>T. trumani australina</i><br><i>T. spp.</i> | <br><br><br><br><br><br><i>T. vaughani</i>            | <br><br><br><br><br><br><i>T. raveneli weisbordi</i><br><i>T. spillmani</i><br><i>T. s. corvia</i><br><br><i>T. trumani garlandica</i><br><i>T. vaughani</i> *<br><i>T. v. "vars."</i><br><i>T. vickburgensis moodiana</i><br><i>T. spp.</i><br><i>Teredo mississippiensis</i> |
| <i>Teredo maverickensis</i> |                                           | <i>Teredo emacerata</i>                                                                                                                                                  | <i>Teredo simplex</i><br><i>T. simplexopsis</i>       |                                                                                                                                                                                                                                                                                |
| <i>T. ringens</i>           |                                           |                                                                                                                                                                          | <i>Textivenus reticulata</i>                          | <i>Timothyus bulla</i><br><i>T. deflatus</i>                                                                                                                                                                                                                                   |
| <i>T. virginiana</i> *      | <i>T. virginiana</i>                      | <i>Timothyus anteproductus</i>                                                                                                                                           |                                                       |                                                                                                                                                                                                                                                                                |
|                             |                                           | <i>Trachycardium ouachitense</i>                                                                                                                                         | <i>Trapizium claibornense</i>                         |                                                                                                                                                                                                                                                                                |
|                             |                                           | <i>Trigonocardia avona</i>                                                                                                                                               |                                                       | <i>Trigonocardia protoalcula</i> *                                                                                                                                                                                                                                             |
|                             |                                           | <i>T. protoalcula</i>                                                                                                                                                    | <i>Trinacria cuneus</i> *                             |                                                                                                                                                                                                                                                                                |
|                             |                                           | <i>Trinacria cuneus</i>                                                                                                                                                  |                                                       |                                                                                                                                                                                                                                                                                |
|                             |                                           | " <i>T. decisa carolina</i> " (See<br><i>Pachecoa</i> )                                                                                                                  |                                                       |                                                                                                                                                                                                                                                                                |
|                             |                                           | <i>Veleda equilatera</i>                                                                                                                                                 |                                                       |                                                                                                                                                                                                                                                                                |
|                             |                                           |                                                                                                                                                                          | <i>Venericardia aldrichi</i><br><i>V. alticostata</i> |                                                                                                                                                                                                                                                                                |
| <i>Venericardia bulla</i>   | <i>Venericardia alticostata</i><br>"var." | <i>Venericardia angustoscrobis</i>                                                                                                                                       |                                                       |                                                                                                                                                                                                                                                                                |
| <i>V. crenata</i>           | <i>V. aposmithii</i>                      |                                                                                                                                                                          |                                                       |                                                                                                                                                                                                                                                                                |
| <i>V. eoa</i>               | <i>V. ascia</i>                           |                                                                                                                                                                          |                                                       |                                                                                                                                                                                                                                                                                |
| <i>V. francescae</i>        | <i>V. bashiplata</i>                      |                                                                                                                                                                          |                                                       |                                                                                                                                                                                                                                                                                |
| <i>V. gardnerae</i>         |                                           |                                                                                                                                                                          |                                                       |                                                                                                                                                                                                                                                                                |
| <i>V. hesperia</i>          |                                           |                                                                                                                                                                          |                                                       |                                                                                                                                                                                                                                                                                |
| <i>V. hijuana</i>           |                                           |                                                                                                                                                                          | <i>V. claiboplata</i>                                 |                                                                                                                                                                                                                                                                                |

| Paleocene                | Lower Eocene                     | Middle Eocene                       |                                           | Upper Eocene                    |
|--------------------------|----------------------------------|-------------------------------------|-------------------------------------------|---------------------------------|
|                          |                                  | L.M.U. Claiborne gr.                | Gosport sd.                               |                                 |
| <i>V. jewelli</i>        |                                  | <i>V. claviger</i>                  |                                           | <i>Venericardia apodensata</i>  |
| <i>V. mediaplata</i>     |                                  | <i>V. complexicosta</i>             |                                           | <i>V. cookei</i>                |
| <i>V. mingoensis</i>     |                                  | <i>V. cookei</i>                    |                                           | <i>V. diversidentata*</i>       |
| <i>V. moa</i>            |                                  | <i>V. densata*</i>                  | <i>V. diversidentata sym-<br/>metrica</i> | <i>V. d. symmetrica</i>         |
| <i>V. m. "n. subsp."</i> | <i>V. densata pendletonensis</i> | <i>V. eutawcolens</i>               | <i>V. inflator*</i>                       | <i>V. d. "var."</i>             |
| <i>V. regia</i>          | <i>V. greggiana</i>              |                                     |                                           | <i>V. inflator jacksonensis</i> |
| <i>V. smithii</i>        | <i>V. gulielmi</i>               | <i>V. klimacodes</i>                |                                           | <i>V. klimacodes*</i>           |
| <i>V. whitei</i>         | <i>V. hatcheplata</i>            | <i>V. leonensis</i>                 |                                           | <i>V. ocalaedes</i>             |
| <i>V. wilcoxensis</i>    | <i>V. horatiana</i>              | <i>V. mooreana</i>                  |                                           |                                 |
| <i>V. spp.</i>           | <i>V. intermedia</i>             | <i>V. natchitoches</i>              |                                           |                                 |
|                          | <i>V. nanaplata</i>              | <i>V. parva</i>                     | <i>V. parva*</i>                          | <i>V. parva "var."</i>          |
|                          | <i>V. n. nanna</i>               | <i>V. perantiqua</i>                |                                           | <i>V. praecisa</i>              |
|                          | <i>V. pilsbryi</i>               | <i>V. rotunda coloradonis</i>       | <i>V. rotunda*</i>                        | <i>V. vicksburgiana</i>         |
|                          | <i>V. potapacoensis</i>          | <i>V. r. flabellum</i>              | <i>V. sillimani</i>                       | <i>V. withlacoochensis</i>      |
|                          | <i>V. sabinensis</i>             | <i>V. r. kingi</i>                  |                                           | <i>V. spp.</i>                  |
|                          | <i>V. turneri</i>                | <i>V. r. subsp.</i>                 |                                           |                                 |
|                          | <i>V. spp.</i>                   | <i>V. stewarti</i>                  |                                           |                                 |
|                          |                                  | <i>V. subquadrata</i>               |                                           |                                 |
|                          |                                  | <i>V. subrotunda</i>                |                                           |                                 |
|                          |                                  | <i>V. texalana</i>                  |                                           |                                 |
|                          |                                  | <i>V. tortidens*</i>                | <i>V. tortidens</i>                       |                                 |
|                          |                                  | <i>V. trapaquara</i>                |                                           |                                 |
|                          |                                  | <i>V. virginaria</i>                |                                           |                                 |
|                          |                                  | <i>V. spp.</i>                      |                                           |                                 |
| <i>Veniella</i> sp.      | <i>Veniella ? rhomboidea</i>     |                                     |                                           | <i>"Venus" jacksonensis</i>     |
| <i>Verticordia</i> sp.   | <i>Verticordia granuloides</i>   | <i>Verticordia mississippiensis</i> | <i>Verticordia eocenensis</i>             | <i>Verticordia cosmmani</i>     |
|                          |                                  | <i>V. satex</i>                     |                                           | <i>V. sp.</i>                   |
|                          |                                  | <i>V. sotoensis</i>                 |                                           |                                 |
|                          |                                  | <i>V. spp.</i>                      |                                           |                                 |
|                          | <i>Vokesula aldrichi</i>         | <i>Vokesula smithvillensis*</i>     |                                           |                                 |

| Paleocene                                                                                                                                                  | Lower Eocene                                                                                                                                                             | Middle Eocene                                                                                                                                             |                                                                                                                                                                                                                                  | Upper Eocene                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                            |                                                                                                                                                                          | L.M.U. Claiborne gr.                                                                                                                                      | Gosport sd.                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                            |                                                                                                                                                                          | <i>V. s. petropolitana</i><br><i>Xylophaga</i> ? <i>mississippiensis</i><br>AMPHINEURA                                                                    |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                            |                                                                                                                                                                          | GASTROPODA (order PTEROPODA)                                                                                                                              | <i>Chiton eocenensis</i><br>"C." <i>prostremus</i>                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                            | <i>Limacina choctavensis</i><br><i>L. elongatoidea</i>                                                                                                                   | <i>Clio</i> sp.                                                                                                                                           | <i>Clio elba</i><br><i>C. nimba</i>                                                                                                                                                                                              | <i>Bovicornu gracile</i><br><i>Clio corpulenta</i><br><i>C. hastata</i> (Olig.*)<br><i>C. simplex</i>                                                                                                                                                                                                                       |
|                                                                                                                                                            |                                                                                                                                                                          | <i>Spiratella augustana</i><br>"Tibiella" <i>texana</i><br>SCAPHOPODA                                                                                     | <i>Tibiella marshi</i>                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                             |
| <i>Cadulus aldrichi</i><br><i>C. phoenicea</i><br><i>C. turgidus</i><br><i>C. sp.</i><br><i>Dentalium eugenii</i><br><i>D. mediavense</i><br><i>D. sp.</i> | <i>Cadulus abruptus</i><br><i>C. bellulus</i><br><i>C. spp.</i><br><br><i>Dentalium microstria</i><br><i>C. multannulatum</i><br><i>D. sylvaeuropis</i><br><i>D. sp.</i> | <i>Cadulus abruptus</i> *<br><i>C. newtonensis</i><br><i>C. ouachirensis</i><br><i>C. subcoarctatus</i><br><i>C. sp.</i><br><i>Dentalium incisissimum</i> | <i>Cadulus depressus</i><br><i>C. turritus</i><br><i>C. sp.</i><br><br><i>Dentalium annulatum</i><br><i>D. arciforme</i><br><i>D. blandum</i><br><i>D. minutistriatum</i><br><i>D. thalloides</i><br><i>D. t. claibornense</i> * | <i>Cadulus jacksonensis</i><br><i>C. juvenis</i><br><i>C. margarita</i><br><i>C. sp.</i><br>"Dentalium bitubatum"<br><i>D. danvillense</i><br><br><i>D. minutistriatum</i><br><i>D. mississippiense</i><br><i>D. jacksonense</i><br><i>D. vincense</i><br><i>D. sp.</i><br><i>Fustiaria danai</i><br><i>F. subcompressa</i> |
|                                                                                                                                                            |                                                                                                                                                                          | <i>D. minutistriatum</i> *<br><i>D. thalloides claibornense</i><br><br><i>D. spp.</i>                                                                     |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                             |

| Paleocene                                                                                                                                                                                                                      | Lower Eocene                                                                                            | Middle Eocene                                                                                                                            |                      | Upper Eocene                           |
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|                                                                                                                                                                                                                                |                                                                                                         | L.M.U. Claiborne gr.                                                                                                                     | Gosport sd.          |                                        |
|                                                                                                                                                                                                                                |                                                                                                         | CEPHALOPODA                                                                                                                              |                      |                                        |
|                                                                                                                                                                                                                                | Aturia sp.                                                                                              | Angulithes eliotti<br>Aturia brazzoensis & cf.<br>A. garretti<br>A. latilavia<br>A. triangula<br>A. turneri<br>A. vanuxemi               |                      | Aturia alabamensis                     |
| Aturoidea paucifex                                                                                                                                                                                                             | Aturoidea pilsbryi                                                                                      | Belemnosella americana<br>Belosaepia alabamensis<br>B. a. voltzi<br>B. harrisi<br>B. saccaria<br>B. uncinata<br>B. ungula*<br>B. veatchi | Belemnosella floweri |                                        |
| Cimomia haltoni<br>C. subrecta<br>C. vaughani<br>C. vestali<br>Eutrepheceras johnsoni<br>E. jonesi<br>E. sp.<br>Hercoglossa gardnerae<br>H. mcglameryae<br>H. orbiculata<br>H. splendens<br>H. ulrichi<br>H. walteri<br>H. sp. | Cimomia marylandensis<br><br><br><br>Eutrepheceras bryani<br>E. sloani<br>Hercoglossa tuomeyi<br>H. sp. | Eutrepheceras cookanum<br>E. reesidei<br>Hercoglossa, n. sp.                                                                             |                      | Eutrepheceras berryi<br>E. carolinense |
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\* type horizon

Except where the same species occurs in different horizons specific names in line horizontally do not indicate stratigraphic relationships

"Nautilus" sp.





|                                           | EUROPEAN STAGES | GROUP              | TEXAS                                                                        | LOUISIANA                         | ARKANSAS    | TENNESSEE      | MISSISSIPPI                                  | ALABAMA                                             | FLORIDA                                                | GEORGIA      | SOUTH CAROLINA    | NORTH CAROLINA | VIRGINIA | MARYLAND                           | NEW JERSEY  |
|-------------------------------------------|-----------------|--------------------|------------------------------------------------------------------------------|-----------------------------------|-------------|----------------|----------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|--------------|-------------------|----------------|----------|------------------------------------|-------------|
| U<br>P<br>P<br>E<br>R<br>E                | LUDIAN          | JACKSON            |                                                                              | DANVILLE LANDING                  |             |                |                                              |                                                     |                                                        |              |                   |                |          |                                    |             |
|                                           | BARTONIAN       |                    | FAYETTE                                                                      | YAZOO                             |             |                | YAZOO*<br>Tullos                             | "Ocala ls."†                                        | BUMPHOSE<br>CRYSTAL RIVER<br>WILLISTON<br>1s."† INGLIS | "Ocala ls."† | COOPER ML.        |                |          |                                    |             |
|                                           |                 |                    |                                                                              | MOODY'S BRANCH                    | WHITE BLUFF |                | MOODY'S BRANCH*                              |                                                     |                                                        | BARNWELL     | BARNWELL*         | CASTLE HAYNE   |          |                                    |             |
| M<br>E<br>O<br>C<br>E<br>N<br>E           | AUVERSIAN       | CLAIBORNE          | YEGUA*<br>C Mount Tabor<br>O Landrum<br>H Hurricane lt.<br>M<br>T.* Wheelock | YEGUA<br>COOK MT.<br>Saline Bayou | ≡           |                | YEGUA<br>Archusa ml.                         | COSPORT SD.<br>UPPER LISBON                         | AVON PARK                                              | MC BEAN*     | SANTIZ<br>MC BEAN |                |          |                                    |             |
|                                           |                 |                    | STONE CITY                                                                   | CANE R. [CLAUCONITIC]             |             |                | ≡                                            | MIDDLE LISBON                                       |                                                        |              |                   |                |          |                                    |             |
|                                           |                 |                    | WECHES<br>Viesca<br>Tyus                                                     |                                   |             |                |                                              | LOWER LISBON                                        |                                                        |              |                   |                |          |                                    |             |
|                                           | LUTETIAN        |                    | QUEEN CITY<br>REKLAW<br>Marquez shale                                        |                                   |             |                | TALLAHATTA<br>(MERIDIAN)*                    | TALLAHATTA*<br>(MERIDIAN)                           |                                                        |              |                   |                |          |                                    |             |
| L<br>O<br>C<br>A<br>L<br>E                | CUISIAN         | WILCOX<br>[SABINE] | SABINETOWN*                                                                  | SABINETOWN                        |             |                | HATCHETIGBEE<br>Bashi                        | HATCHETIGBEE*<br>Bashi*                             |                                                        |              |                   |                |          |                                    | MANASQUAN   |
|                                           | YPRESIAN        |                    | PENDLETON FERRY*                                                             | PENDLETON FERRY                   |             |                | TUSCAROMA<br>Bells Landing<br>Greggs Landing | TUSCAROMA*<br>Bells Landing*<br>Greggs Landing*     |                                                        | WILCOX†      |                   |                |          | NANJEMY<br>Woodstock greensand ml. | VINCENTON   |
|                                           | SPARNACIAN      |                    | SEQUIN                                                                       | MARTHAVILLE                       |             |                | NANAFALIA                                    | NANAFALIA*                                          |                                                        |              | BLACK MINGO*      |                |          |                                    |             |
| P<br>A<br>L<br>E<br>O<br>C<br>E<br>N<br>E | THANETIAN       | MIDWAY             | WILLS POINT<br>Kerens<br>Mexia                                               | HALL SUMMIT                       |             | PORTERS CREEK* | NAHEOLA<br>PORTERS CREEK                     | NAHEOLA*<br>Matthews Landing*<br>Succarnoochee cl.* |                                                        |              |                   |                |          |                                    |             |
|                                           | MONTIAN         |                    | KINCAID<br>Tehuacana<br>Pisgah<br>Littig                                     | "Logansport fm."                  |             |                | CLAYTON                                      | CLAYTON*                                            |                                                        | CLAYTON      |                   |                |          |                                    |             |
|                                           | ? DANIAN        |                    |                                                                              |                                   |             |                |                                              |                                                     |                                                        |              |                   |                | AQUILA*  | AQUILA                             | BORNERSTOWN |

\* State of type locality

† undifferentiated

≡ formations present but not involved

Formations are printed in capitals. Members are printed in capital and lower case letters. The terms included are mainly those used in the text modified to the more modern interpretation. The Claiborne group of Texas follows that of Stenzel, Krause, and Twining, 1957. Such a formalized scheme does not allow the insertion of Crockett, Mount Selman, and Laredo formations, upper Claiborne group in the limited space of the chart. See glossary of the stratigraphic terms involved in the text.



## PLATES

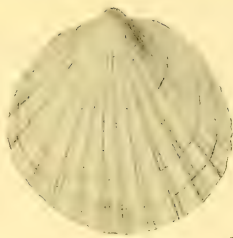
## Explanation of Plate 1

All figures are drawings by Otto Meyer for T. H. Aldrich.  
Dimensions are indicated by the drawing.

| Figure                                                                                                       | Page |
|--------------------------------------------------------------------------------------------------------------|------|
| 1, 2. <b>Glycymeris intercostata</b> (Gabb) .....<br>Holotype, ANSP.                                         | 152  |
| 3. <b>Flexopecten anatipes</b> (Morton) .....<br>Holotype, No. 12575 ANSP.                                   | 144  |
| 4, 5. ? <b>Crenella latifrons</b> Conrad .....<br>Holotype, missing ANSP.                                    | 114  |
| 7. " <b>Perna</b> " <b>texana</b> Gabb .....<br>Holotype, ANSP. Natural size.                                | 261  |
| 8, 9. <b>Aequipecten perplanus</b> (Morton) .....<br>Holotype, ANSP. "St. Stephens limestone, Ala."          | 25   |
| 6, 10. <b>Nemocardium gambrinum</b> (Gabb) .....<br>Holotype, ANSP. 6. Enlarged sculpture of posterior ribs. | 204  |



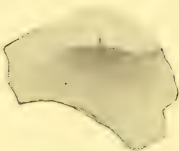
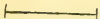
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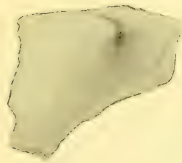
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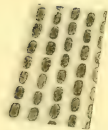
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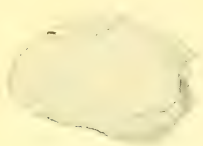


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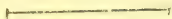
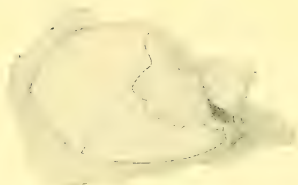




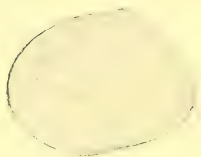
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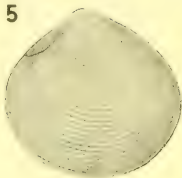
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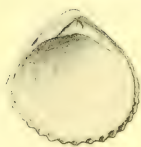
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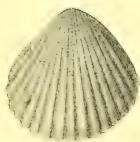
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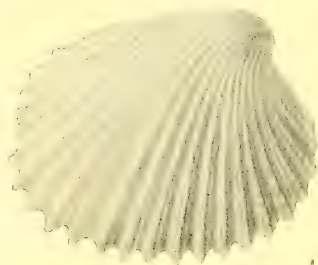
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## Explanation of Plate 2

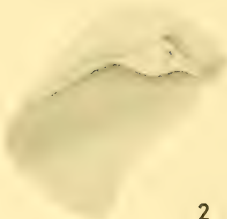
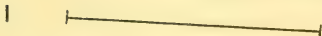
All figures are drawings by Otto Meyer for T. H. Aldrich.  
Dimensions are indicated by the drawing.

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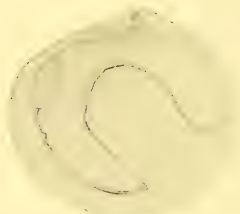
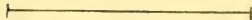
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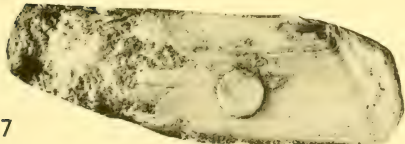
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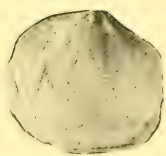
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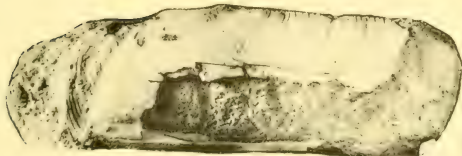
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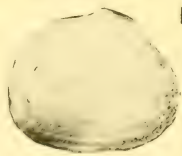
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